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THE

VACCINATION INQUIRER

AND

HEALTH REVIEW.

THE ORGAN OF THE LONDON SOCIETY FOR THE ABOLITION OF COMPULSORY VACCINATION.

HE WHO KNOWS ONLY HIS OWN SIDE OF THE CASE, KNOWS LITTLE OF THAT.—*J. Stuart Mill.*

VOLUME THE THIRD.

APRIL, 1881, to MARCH, 1882.

LONDON:
114, VICTORIA STREET, WESTMINSTER;
AND EDWARD W. ALLEN, 4, AVE MARIA LANE.
1882.

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He who knows only his own side of the case, knows little of that.—J. STUART MILL.
Prejudice, which sees what it pleases, cannot see what is plain.—AUBREY DE VERE.

The Vaccination Inquirer

And Health Review.

VOL. III., No. 25.] APRIL, 1881. [PRICE 2d.

NOTES OF THE MONTH.

THE letters of Mr. Gibbs to Mr. Dodson and Dr. Spottiswoode are noteworthy. We saw with some amazement last summer the President of the Royal Society dragged at the tail of the Medical Trades Unions to protest against the Government bill for limiting fines for non-vaccination. "What concern," we exclaimed, "can Dr. Spottiswoode have in that business!" but reflecting how anything in the sacred name of Vaccination is accounted justifiable, that special folly seemed of less significance. By and by came the President's own explanation, which we think is at fault as to matter-of-fact. It would appear as if he took the initiative in consulting the Physicians and Surgeons. Was it not the other way? and was there not a little hesitation in convincing the P.R.S. that "a scientific principle" was indeed at stake? Dr. Spottiswoode is discreet in declining to explain "the scientific principle" to Mr. Gibbs; and it is to be regretted that he did not display equal discretion when solicited to lend the prestige of the Royal Society to a questionable purpose.

THE attempt to subject children attending Board Schools to examination for vaccination should be firmly opposed. It is on a par with projects continually suggested, and occasionally attempted, of house to house visitation for the same purpose. Such espionage is without any warrant in law, and ought to be resented decisively. The Chelsea Guardians lately set the public vaccinator to inspect the children in the Chelsea Schools, but he had not advanced far with his inquisition when it was stopped by order of the School Board. In taking this step, we trust the Board may be sustained by public opinion, for influential attempts will be made to reverse it. The progress of education is hampered in many ways, and sufficient odium is incurred by the persistency requisite to compel attendance at school; but if parents can allege that their children are liable to be stripped for examination with a view to their vaccination or re-vaccination, they will have the sympathy of many in resisting measures with such odious accompaniments.

THE speeches of Mr. Tebb, Dr. Collins, Dr. Pearce, Dr. Haughton and others at the annual meeting of the Vigilance Association were thoroughly appropriate. The Association is established "for the defence of personal rights and the amendment of the law;" and surely none will dispute that compulsory vaccination has been the initiation of that iniquitous legislation against which the action of the Association is directed. The Contagious Diseases Act (Women) would never have been passed had not the course been made smooth for medical despotism by repeated enactments in favour of vaccination. We can never too jealously resist inroads on personal liberty. Every surrender is converted into a precedent and an argument for more extensive concessions. Thus it seems inconceivable to many advocates of vaccination why the rite is not enforced at all hazards on unbelievers, and re-vaccination likewise. Their minds are so demoralised by wrong already committed, that they have no sense of the deeper wrong proposed. Mr. Jacob Bright observed in kindly spirit, that anti-vaccinators had their own societies and organs, and might leave the Association to the special work which the executive pursue with so much vigour. The observation was not without good sense, but the Association will operate none the less efficiently if the members bear in mind the scope of their programme and that with anti-vaccinators they have a common enemy, who if defeated on the ground of compulsion in vaccination would leave to the Association an easier victory in their special contention.

DR. B. W. RICHARDSON delivered an emphatic rebuke to the Vaccination Jingoes represented by Mr. Michael at the Sanitary Institute on 9th

March. "I have always," he said, "felt the value of vaccination in every possible way. I go farther than most defenders of the practice, because I believe that some of the evils attributed to it are owing to other causes. If however the experiment recommended by Mr. Michael of taking the child out of the hands of the mother and putting it into the hands of a public official or policeman for vaccination were adopted, it would create such a revulsion of feeling in the minds of the public, that Vaccination would be doomed." That such would be the issue is obvious, and therefore when the prescription is advised we always say, "Try it." The measure of compulsion under which we now suffer is working wonderfully in exciting inquiry and resistance to the practice, and will inevitably terminate in its complete exposure and overthrow. Dr. Richardson has promised to deliver a lecture on small-pox and vaccination, and we have little doubt that he will at least place the matter in which we are so deeply concerned in a new light. We cannot have too much discussion, and whoever helps to bring the public mind into close and vivid relation with the realities of the question does true service.

Re-Vaccination is the cry, and the walls of London continue to be studded with posters imploring the public to avail themselves of the proffered salvation. The dodge is being overworked, and will ere long fall into contempt. Meanwhile the Registrar-General reports that the metropolitan mortality is below the average, in spite of fifty or sixty deaths weekly from small-pox, or one in every 60,000 Londoners. The *Times* continues to distinguish itself by its extravagant treatment of the epidemic. The Hampstead Hospital having been closed as a common nuisance, the Editor goes on to say, "The one practical lesson to be learnt from the dismal business is the importance of vaccination and of re-vaccination," and relates the standard fable of the re-vaccinated nurses who "all escape the contagion." Then comes an anecdote of "eight unvaccinated children from one family, ranging from fifteen years to two, who were admitted a week or two since into one of the hospitals, all with small-pox, and *at least one of them has died.* The parents of these eight children were people who had resisted vaccination by every device in their power, and had resisted it successfully. The result of their disobedience to the law is that *some of their children perish miserably*, and that all become sources of danger to the rest of the community." Observe the trick in the words italicised: how *one at least died* developes into *some* who *perish miserably.* It would be interesting to have the name and address of these anti-vaccinating parents, who resisted the law so successfully; for particulars in such cases usually lead to the detection of more or less fiction. Nevertheless it is not to be supposed that we maintain that *not* to be vaccinated is to be secure from small-pox, though it is often assumed that such is the contention of anti-vaccinators. What we say is, that other conditions being equal, the unvaccinated have the better chance of recovery. As for the power of vaccination to prevent small-pox, Dr. Tripe of Hackney reports sixty-eight cases of which fifty-seven were vaccinated, and thereon proceeds to enforce the necessity of re-vaccination! What would these fanatics have? The great majority of cases of small-pox occur in the young in whom the whole virtue of primary vaccination is present. If the young are to be re-vaccinated, is it intended that vaccination be an annual performance? That seems to be the point at which some vaccinators are driving, but have not the courage to say so.

We are glad to note the appearance of a third and enlarged edition of *The Fable of the Small-Pox Hospital Nurses saved from Small-Pox by Re-Vaccination*, and we commend it to wide circulation. Whoever raises the question of Vaccination is told, "Yes, but you forget that nurses who are re-vaccinated never take small-pox. You cannot get over *that* fact." We reply, the large immunity of nurses from infection is not limited to small-pox, nor did it begin with the introduction of vaccination. A Physician who in 1801 published *Instructions relative to Self-Preservation during the prevalence of Contagious Diseases* observed, "Nurses, being generally advanced in years, habituated to fatigue, and little liable to hurry of spirits, do not readily receive infection; yet it is requisite for them to keep their clothes and persons clean, not only on their own account, but for the sake of others also." Small-pox is predominantly a disease of the young, and nurses are not young. Then we have to take into account what the writer of *The Fable* designates "the common law of seasoning." If a woman introduced to a small-pox hospital as a nurse withstands infection for a week, she may be regarded as "seasoned" and safe, but if she succumbs to the variolous

atmosphere, she is taken for a patient, and is not reckoned among nurses until her recovery. Many of the nurses employed in small-pox hospitals have entered as patients; and some of the most trustworthy and efficient have thus been introduced to their vocation. Women who have any choice in their lot are not likely to seek employment in fever or small-pox hospitals; and thus limited in age, character and condition, we see how by a perfectly natural process of selection, nurses are a class of women little likely to be subjects of infection. As to the protective influence of re-vaccination, we have the testimony of Mr. Porter, who had superintendence of the Dublin Hospital. "I have no faith in it," he says. "Not one of the 86 attendants at the South Dublin Union sheds has taken small-pox. Only 7 of the number were re-vaccinated, and as the remaining 29 enjoyed the same immunity, wherein is the necessity of the operation?" These, and kindred facts, are perfectly familiar to medical men. They no more expect nurses to catch small-pox than to catch it themselves. But they allow the Fable about the Nurses to circulate among the ignorant and vulgar because it contributes to the credit of vaccination!

Dr. Neild of Plymouth has written to the *British Friend* to complain of the want of charity displayed in ascribing to the love of fees the favour shown by medical men for vaccination. He thinks small-pox epidemics would pay better than vaccination. We fear Dr. Neild is not strong in arithmetic. Every child is a customer for vaccination, and for re-vaccination where the parents are sufficiently docile. How could the transient gains from the severest epidemic compare with so steady a revenue? An outbreak of small-pox in Plymouth might furnish Dr. Neild with three or four patients, but with their recovery his profit would cease. Vaccination is a constant source of income, and to some practitioners it is their chief means of livelihood. It is, we allow, unfair to identify the defence of vaccination with a concern for fees; but at the same time we have to remember that no profession ever surrenders a source of gain, however discreditable, unless by external compulsion; nor can we forget how last year the medical profession was stirred to its depths by the mere proposal to reduce the severity of the persecution for non-vaccination. Human nature is the same in doctors as in other men, and whilst it is well to be charitable, it is not necessary to be blind, or to pretend to be blind.

Mr. W. J. Collins, M.R.C.S., delivered a lecture entitled, "Ought Vaccination to be Enforced?" before the Abernethian Society at St. Bartholomew's Hospital, which was followed by discussion that extended over two evenings. The lecture is to be printed, and, we trust, with a report of the discussion; for it would be interesting to know how such a question is regarded by the young men and students of a great medical school. Mr. Collins, at the solicitation of the London Society for the Abolition of Compulsory Vaccination, repeated the lecture at their monthly Conference, where it afforded great satisfaction. The matter was attractive and well arranged, the tone temperate, and the conclusion irresistible.

Mr. Dodson has announced that arrangements are nearly completed for the issue of pure lymph from the calf for primary vaccination, and that Dr. Cory has been constituted head of the new Department, for which a liberal allowance has been made by the Treasury. We are puzzled to account for the transaction. The majority of the Medical Conference on Animal Vaccination held in London in December, 1879, were clearly of opinion that "pure lymph from the calf" was a mere whimsey, advocated in ignorance, and calculated to discredit the existing system of arm-to-arm practice; and no vote of the House of Commons has been taken on the subject. Yet here we see a change initiated, new offices created, and expenses incurred, and at whose instance and by what authority? We shall not go far wrong if we ascribe the transaction to the weakness and cowardice of the Medical Department of the Local Government Board. Whilst avowedly without faith in the assertions and pretensions of the Animal Vaccinators, they are afraid to imperil the vaccination fabric by encountering their opposition, and have therefore yielded to their demands. As anti-vaccinators we have no reason to complain that the Evil House is divided against itself, and that first and second class vaccination is established—one warranted safe and the other open to suspicion. Who are to be vaccinated with the safe lymph, and who with the doubtful? The question will presently demand an answer, and there is therefore a pleasant controversy for Mr. Dodson to look forward to.

A FATHER'S EXPERIENCE.

[We owe the following interesting family history as concerns small-pox and vaccination to our able and energetic friend, Mr. A. E. Giles. We may premise, for the benefit of English readers, that Mr. E. Wright holds an honourable place in the record of the American anti-slavery movement, and is now President of the National Liberal League, and an actuary of the first eminence in New England.]

Boston, 23rd December, 1880.

MY DEAR SIR,—I have at last found time to examine the anti-vaccination papers you were so kind as to leave me. I did not need them to convince me of the wrong of *compulsory* vaccination. But I find they make a strong case against vaccination anyway. I was brought up to place unbounded faith in it. Was vaccinated myself in babyhood. My late wife, born in Boston, 1810, was repeatedly vaccinated without even raising a pustule. In 1837, while visiting in New York, I was exposed to small-pox, and suffered what the doctors called *varioloid*, and my wife *variola*. She suffered severely, but recovered without marks. It was about the third month of her pregnancy, and the child, though large and apparently healthy, was always defective in his locomotive power, till his death by drowning at the age of 21.

In 1841, while I lived in Dorchester, Mass., we had a baby vaccinated by Dr. Mulliken, the pustules being pronounced by the doctor all right; but she never recovered, and died after three years of suffering, the most pitiable object I ever beheld. The death occurred in Boston, while we had Dr. Walter Channing as our physician. His opinion was clear that the deplorable disease was caused by the bad lymph used; but as he believed in vaccination, and thought good and "pure" lymph could be obtained, we had other children vaccinated, down to 1847, by him. About that time I began to have serious doubts of the value of vaccination, and I think Dr. Channing had some too, for in communicating mine to him he no longer pressed the matter of vaccinating the babies he helped into the world in my family, and the four youngest were not vaccinated. In 1860, when we had ten living, in the most crowded part of the city, all the younger and some of the older were exposed to a bad case of small-pox. All the children, except the oldest boy, were taken down at nearly the same time, and the two youngest, twins, at the age of seven, died, within a week of each other. Two of the unvaccinated recovered, one very badly marked and the other not perceptibly.

Though I am not prepared to say that the artificial disease may not, on the average be milder than the natural, I am decided that no words can be too strong against a compulsory enforcement of the former. The great question is, Cannot wise sanitary precautions make even voluntary vaccination inexcusable?

I am quite aware that the value of my experience is infinitesimal, and only give it because you so kindly asked it.—Yours truly,

ELIZUR WRIGHT.

To ALFRED E. GILES, Esq.,
Hyde Park, Mass.

THE STORY OF A GREAT DELUSION.

CHAPTER XXV.

MOSELEY, ROWLEY, AND SQUIRRELL.

IT is time to leave the early records of vaccination, but it may be well to devote a chapter to those antagonists of the practice who, though right in their contention against cow-pox, did more or less to discredit their cause by scurrility and extravagance. The faults of these men are frequently adduced as evidence of the absurd and brutal resistance which vaccination encountered, but it is constantly forgotten how intense was their provocation, and how the bad on one side was matched by the bad on the other. It was a contest between small-poxers and cow-poxers, alike ignorant of the conditions of physical well-being. It is plain, however, in the light of our later experience, that much that was asserted by the small-poxers of the uselessness and harmfulness of cow-pox must have been exactly and painfully true, though persistently and ferociously denied.

In the *Edinburgh Review* for October, 1806, appeared an article entitled "Pamphlets on Vaccine Inoculation," which may be taken as a reflection of the state of the controversy at that date, and as an index to the chief offenders against propriety. The article is said to have been written by Sydney Smith (though not included in his collected writings), and may pass for a product of that perspicuous intelligence, which reduced to order whatever was subjected to its action in much the same way that a housemaid "sets to rights" a library by ranging the books according to their sizes and bindings, and assorting the papers so that they lie neatly disposed. As is the habit of able editors, a view of the variolous controversy was evolved that might be comfortably accepted and confidently repeated by his readers—the evolution of such rational mirage being regarded for the time as veracious matter-of-fact.

First we may take the reviewer's evidence as to the extent and fury of the controversy—

"The ample and public testimony offered in favour of vaccination seemed for a while to set the question at rest; and, except in a few obscure pamphlets and communications to the medical journals, little was heard in opposition to it, till 1804, when Mr. Goldson of Portsmouth published six cases of small-pox occurring after vaccination, accompanied with observations, calculated to shake the confidence which was now very generally placed in the security of the Jennerian inoculation. These were answered by Mr. Ring and others, who endeavoured to show that, in some of his cases, Mr. Goldson's patients had not had the genuine cow-pox in the first instance, and that in others, they had not had the genuine small-pox thereafter. This part of the controversy was conducted with temper, and with a reasonable degree of candour. In the end of the same year, however, Dr. Moseley published his treatise on the cow-pox, in which the ravings of Bedlam seemed to be blended with the tropes of Billingsgate. Dr. Rowley followed on the same side, and in the same temper, with 500 cases of 'the beastly new diseases produced from cow-pox,' and attracted customers by two coloured engravings at the head of his work of 'the cow-poxed, ox-faced boy,' and 'cow-poxed, mangey girl.'

The battle now became general. The Reverend Rowland Hill thundered in defence of vaccination —Dr. Squirrell leaped from his cage upon the whole herd of vaccinators—Mr. Birch insisted upon stating his serious reasons for objecting to cow-pox—Drs. Thornton and Lettsom chanted pæans in its praise —Mr. Lipscomb strutted forward with a ponderous, wordy dissertation on its failures and mischiefs; and Messrs. Ring, Merriman, and Blair answered everybody; and exasperated all their opponents by their intemperance and personality. Charges of murder and falsehood were interchanged among the disputants without the smallest ceremony; the medical journals foamed with the violence of their contention; it raged in hospitals and sick-chambers; and polluted with its malignity the sanctity of the pulpit and the harmony of convivial philanthropy.

"In the whole course of our censorial labours, we have never had occasion to contemplate a scene so disgusting and humiliating as is presented by the greater part of this controversy; nor do we believe that the virulence of political animosity or personal rivalry or revenge ever gave rise, among the lowest and most prostituted scribblers, to so much coarseness, illiberality, violence and absurdity as is here exhibited by gentlemen of sense and education discussing a point of professional science with a view to the good of mankind. At one time, indeed, we were so overpowered and confounded by the clamour and vehement contradictions of the combatants, that we were tempted to abandon the task we had undertaken, and leave it to some more athletic critic to collect the few facts and the little reasoning which could be discerned in this tempest of the medical world."

Furious was the controversy, but why was it furious? There are often great fights over little matters, but the reason is that the little matters are vitally related to the self-love of the combatants; and thus it was with the cow-poxers and the small-poxers. The cow-poxers set out with the absolute assertion that whoever submitted to their prescription would be secure from small-pox for life. Without proof, or with powerful sham proof, the assertion was endorsed by the mass of the medical profession, and there followed the conversion of the community in that sort of faith-panic which is described by Carlyle as Swarmery—

"All the world assenting, and continually repeating and reverberating, there soon comes that singular phenomenon called Swarmery, or the gathering of men in swarms; and what prodigies they are in the habit of doing and believing when thrown into that miraculous condition! Singular, in the case of human swarms, with what perfection of unanimity and quasi-religious conviction the stupidest absurdities can be received as axioms of Euclid, nay, as articles of faith, which you are not only to believe, unless malignantly insane, but are (if you have any honour or morality) to push into practice, and, without delay see *done*, if your souls would live."*

People thus enchanted do not like to be brought to their senses; and medical men, who in 1800 attested the perpetual prophylaxy of cow-pox, were naturally very unwilling to be proved deceivers and deceived. When cases of small-pox were reported as following vaccination, they at first denied the possibility, saying that either there had been no vaccination, or that the small-pox was not small-pox. On the other hand, the small-poxers who had been snuffed out by the cow-poxers, revived in presence of the discovered impotence of the new practice, and stoutly maintained, and cruelly demonstrated that unquestionable vaccinations were followed by unquestionable small-pox. It needs little acquaintance with human nature to see unlimited elements of bitterness in these conditions. To be convicted of imposture does not beget equanimity, nor contradiction as to plain matter-of-fact; and thus convicted were the cow-poxers and thus contradicted were the small-poxers.

The Edinburgh reviewer described Dr. Moseley's treatise on cow-pox as blending "the ravings of Bedlam with the tropes of Billingsgate." Some Billingsgate we concede, but Bedlam not at all. Much however depends on the point of view. Vaccination if regarded as a blessing in which the inspiration of heaven was consummated in the salvation of the human race from small-pox,* resistance thereto might appear, as Carlyle observes of creatures under enchantment, as "malignantly insane."

Dr. Moseley's book,† it is to be allowed, was singularly exasperating. He had spoken against cow-pox from the outset, and was charged with condemning that of which he knew nothing, to which he cogently replied that he could scarcely know less than the gang of medical men who attested its perpetual efficacy in the newspapers of 1800 before they had any proper experience of it whatever. If his scepticism was premature, what was their credulity? Moseley had patience: no argument could be heard in the rage that set in for the new salvation. "Cow-pox, I admit, is not contagious," he said, "but cow-mania is." When, however, in process of time it was seen in hundreds of cases that cow-pox conferred no immunity from small-pox, he published in 1804 *Lues Bovilla*—a somewhat pompous treatise, with frequent touches of superfluous learning, and permeated with the irritating superiority of the true prophet—"You see it has turned out just as I predicted!" Nor was he content to make general assertions: he specified the names and addresses of those who had been correctly vaccinated, or had taken cow-pox from the cow, and had subsequently suffered from small-pox with their neighbours; also of cases of severe illness, injury, and death resulting from vaccination. Bluster was idle in presence of such facts. Even the Royal Jennerians had to eat humble pie, for in their Report, dated 2nd January, 1806, we read—

"It is admitted by the Committee that a few cases have been brought before them of persons having the small-pox who had apparently passed through the cow-pox in a regular way."

* *Shooting Niagara.*

* "Neglect not, I exhort you, such proffered blessing. Secure yourselves from danger; preserve your children; and render most grateful thanks to Almighty God who has so providentially permitted to man this means of defence against the pestilence that walked in darkness, and the sickness that destroyed in the noon-day."—*Address of the Rev. T. A. Warren to his Parishioners*, reprinted by the Royal Jennerian Society, 1803.

† *A Treatise on the Lues Bovilla or Cow-Pox.* By Benjamin Moseley, M.D. Second Edition. London: 1805. Pp. 142.

With so much admitted by such furious fanatics, what might not be inferred!

Moseley was held in high esteem alike by the profession and the public, and his judgment enforced by so much serious evidence contributed heavily to the discredit of vaccination, and unfortunately to the resumption of variolous inoculation. That the reaction was extensive, especially in London, appears from numerous contemporary testimonies, which Moseley confirms in saying—

"The people at large are not to be reproached for putting their faith in this splendid imposition on humanity; and to the credit of their discernment and parental feelings, the middle and inferior classes have taken precedence in renouncing the delusion. At this moment, unless attacked by surprise, or with threats, or cajoled by artifice (all of which have been practised on them) there are now none among them in London and the adjacent villages who will expose their children to Cow-Pox Inoculation."

Rowland Hill was a religious and philanthropic notable in those days, and in common with many of his kind, was an enthusiastic vaccinator. A leading spirit in the Royal Jennerian Society, he had the school-room of Surrey Chapel constituted a vaccination station whereat Dr. Walker officiated. Nor was he content to patronise the practice, but was himself an energetic operator. Speaking at the annual meeting of the Jennerian Society, 17th May, 1806, he said—

"With my own hands I have vaccinated upwards of 5,000 persons," and, lifting up his eyes to heaven, exclaimed, "I solemnly declare before God, I have not had a failure in a single instance. What then shall we say of the false and daring publications of those who denounce the benign practice, and how shall they answer for their conduct to their King, their Country, and their God!"

A man so committed and so possessed naturally resented the growing distrust of vaccination. It cut him deeply to be supposed a quack; and in 1806 he issued a pamphlet* relating his experiences as a Jennerite, defending his practice, and denouncing those who treated it despitefully. Moseley especially was subjected to severe and contemptuous condemnation. Hill's sanctimony and virulence, his vigour and venom compose a piquant mixture, and if we could tarry for amusement we might produce it abundantly from a variety of elegant extracts. Consider, for instance, this his adjuration, and its pitiful object—

"Oh, the blessing of the Jennerian inoculation! Did ever man stand as Jenner so much like an Angel of God, an instrument in the hands of Divine Providence between the living and the dead till the plague was stayed!"

Hill's latent assumption throughout his discourse was—

First, that all must have small-pox; and

Second, that all the vaccinated, who escaped small-pox, owed their salvation to their Jennerisation.

It never apparently occurred to him that before Jenner was heard of, many passed through life exempt from small-pox; nor, consequently, did he inquire *how* they escaped; nor *why*, when vaccination was introduced, their escape should be placed to its credit.

The belief in the vicarious influence of vaccination comes out strongly, too, in Hill's pamphlet. Of Londoners there were then over 1,000,000, and of these, he says, at least 100,000 had been vaccinated, and with this effect—

"Vaccination reduced the deaths from small-pox in London to 10 per week; but after the inoculators had been making their clamours, the applicants for vaccination diminished, and the deaths soon rose to 100 per week.

"Now can effrontery itself deny that the introduction of vaccination was the sole cause of reducing the fatality on the small-pox list?"

Thus one in ten being vaccinated, small-pox was reduced throughout the unvaccinated 9-10ths; and as soon as the vicarious operations dropped, up went the rate of mortality! Nor was Hill singular in this persuasion. He cites his friend Dr. Lettsom as writing to him, 25th March, 1806—

"Vaccination was gradually lessening the mortality in 1804, when about the middle of 1805 false reports against vaccination gained very general credit, and vaccination was nearly suspended; the consequence was the death of 1286 children in four months (September to December) or ten every day, each of whom might now have been alive had the blessing of vaccination been accepted."

And to Moseley he wrote, November 9, 1808—

"The increase of births and decrease of deaths has added 3,000 lives annually to the population of London during the period that vaccination has been practised."

Talk evidently sincere, and widely repeated, but with how little serious consideration for truth!

To return to Moseley. He was not the man to endure Hill's aggression submissively, and in a pamphlet entitled *An Oliver for a Rowland*,* he made a terrific reprisal. The public were delighted with it, and in the course of a few months it ran through ten editions. Hill was generally regarded as a clerical mountebank, with more impudence than piety, and to see him knocked over, kicked, and rolled in the mire, was sport that carried many sympathisers. Moseley's opening address gives the key to the whole performance—

"ROWLAND,—I bought your pamphlet, entitled *Cow-Pox Inoculation Vindicated*, dated the 25th of March, 1806.

"I paid a shilling for it. Rowland,—it is not dear. The same quantity of folly, falsehood, and impudence, could not have been bought for twice the money of any other cow-poxer from the Ganges to the Mississippi.

"But let me ask you, Rowland, what could induce you to take up your pen to attack me on the

* *Cow-Pox Inoculation Vindicated and Recommended from Matters of Fact.* By Rowland Hill, A.M. London: 1806. Pp. 72.

* *An Oliver for a Rowland; or, a Cow-Pox Epistle to the Rev. Rowland Hill under the wing of Surrey Chapel.* By Benjamin Moseley, M.D. 10th Ed. London: 1807. Pp. 102.

subject of Physic, who never attacked you on the subject of Religion? Would it not have been more prudent in you to have continued to expose yourself in your own trade in your own shop?

"As to my learned friend Dr. Lettsom (who is never out of the way when there is good to be done) being moved to instigate you, a Methodist parson, to enter into a medical controversy—that can only be accounted for by supposing he owes you a grudge, and put you into my hands for payment."

Paid he was with interest—gross and Rabelaisian; and Hill, when he had picked himself up and recovered his senses, discreetly retired from the combat.

Spite of his pomposity and buffoonery, there was good sense and humour in Moseley, and his resistance to the Jennerian mania was not ineffective. As he wrote in 1808—

"It is ten years since I began this Trojan war against Vaccinia; and if it be not yet ended, I have at least the satisfaction to see that her original troops are no longer able to defend her throne; and that the mobled Queen with 'a clout upon her head where late the diadem stood,' has fallen to a new dynasty of mercenaries."*

In Dr. Munk's *Roll of the Royal College of Physicians* we read, that Dr. Moseley was appointed physician to Chelsea Hospital in 1788, "an office which he filled with the highest *éclât* for more than thirty years"—until his death in 1819—

"Though a shrewd practitioner, and undeniably a man of extensive mental capacity and very considerable attainments, Dr. Moseley was a violent opponent of Vaccination, on which his communications to the press were incessant. They did little credit to his medical penetration, or his qualifications as a dispassionate searcher after truth, and, happily for his reputation, are now well nigh forgotten."†

Are they? For what else is Dr. Moseley remembered? So that a man does his duty in the world, whether he be forgotten or remembered is not worth a thought; but Moseley's early and steadfast resistance to the Cow-Pox Imposture will long constitute his title to grateful recollection.

Dr. William Rowley, Physician to the Marylebone Infirmary, also left his mark in medical history as a determined opponent of vaccination. He had seen the profession and the public go mad about so many absurd novelties, that it did not surprise him that they should go mad about cow-pox: and after due experience and investigation he delivered judgment on the craze and its pernicious effects in a pamphlet entitled *Cow-Pox Inoculation no Security against Small-Pox*,‡ containing two coloured engravings representing the Cow-Poxed Ox-Faced Boy, and the Cow-Poxed Mangey girl. Much ridicule was expended on these pictures, and to this day whoever wishes to be funny and create giggle over the early resistance to vaccination tells how one Dr. Rowley maintained that Jenner's benign virus induced the face of an ox on a boy; but like the majority of comic anecdotes, it is untrue. The engraving represents a comely lad with a swelling on the upper part of his left cheek, which was thought to give that side of his face an ox-like expression. Many a medical practitioner among the poor would at this day have little difficulty in presenting living examples of affliction answering to Rowley's pictures—and worse. It was, moreover, the fear or fancy of many at the time that inoculation with cow-pox might beget bovine characteristics in the human species, and the fear or fancy was turned to inevitable account in jest and earnest. The jest is visible in some of Rowlandson's caricatures, and stories like this got into circulation—

"A child at Peckham, after being inoculated with cow-pox, had its former natural disposition absolutely changed to the brutal, so that it ran upon all fours like a *beast*, bellowing like a *cow*, and butting like a *bull*."

In order to discredit Rowley, it is thought fair policy to connect him with such nonsense, and to have it supposed that he rested his case upon "the cow-poxed ox-faced boy:" it was far otherwise. He diligently tracked the vaccinators, and accumulated 504 cases of small-pox and injury after vaccination with 75 deaths, particulars being accurately specified. Nor was he content merely to report what he had ascertained. "Come and see," was his forcible argument. "I have lately had under my care," he wrote, "some of the worst species of malignant small-pox in the Marylebone Infirmary, which many of the faculty have examined and know to have been vaccinated." His trust in "Come and see," he still more powerfully exemplified in an exhibition of the injuries inflicted by vaccination in his Lecture Room in Savile Row in October, 1805. "Knowing," he said, "the cavilling character of the cow-poxers, I determined to leave them no hole for retreat"; and therefore he brought together Joules, "the ox-faced boy, who also had a terribly diseased elbow-joint"; Marianne Lewis, the mangey girl, "who was covered with blotches like a leopard"; "a load of children in a cart from the south of London," and others accompanied by their parents, and displaying their various maladies, said, "Behold the effects of the new disease that has been taken from the cow and implanted in humanity!" This painful exposition was continued over two days, and as he records, "the scene was truly affecting and distressing to all who witnessed it." An antagonist like Rowley is a serious

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* *A Review of the Report of the Royal College of Physicians of London on Vaccination.* By Benjamin Moseley, M.D. London: 1808. Pp. 86.

† *The Roll of the Royal College of Physicians comprising Biographical Sketches.* By William Munk, M.D. London: 1878. 2nd Ed. 3 Vols.

‡ *Cow-Pox Inoculation no Security against Small-Pox Infection. To which are added the Modes of treating the Beastly New Diseases produced from Cow-Pox, explained by two coloured copper-plate engravings, as—*

Cow-Pox Mange — *Cow-Pox Evil or Abscess*
Cow-Pox Ulcers — *Cow-Pox Mortification.*

With the Author's certain, experienced and successful mode of Inoculating for the Small-Pox which now becomes necessary from Cow-Pox Failure, etc. By William Rowley, M.D., Member of the University of Oxford, the Royal College of Physicians, London, and Physician to the St. Marylebone Infirmary. London: 1805. Pp. 82. The first edition appeared 4th October, 1805, and a third 27th January, 1806.

factor in any controversy, and we may estimate the havoc he wrought by the extreme anxiety of the Jennerites to have him estimated by the supposed absurdity of the ox-faced boy.

To a man of practical temper like Rowley, the enthusiasm with which vaccination was at first advocated appeared akin to delirium—

"I have been in some vaccination storms, and have had the buttons torn off my coat, cloth and all, to convince me of the great and infallible excellence of Cow-Pox. I have seen some of the vehement vaccinators redden like a flame with fury, their lips quivering, their eyes starting out of their heads, their mouths foaming, their tongues dropping hard words, and their fists clenched like pugilists, ready to accompany their violent wrath with other knock-down arguments. In such circumstances, mild, investigating Philosophy quits the scene and leaves the field of battle to the Bedlamites."

The fury had subsided in 1805, and Rowley held that many medical men were deeply ashamed of the extravagance into which they had been committed, but lacked courage to make frank confession after the manner of the Prayer Book saying—

"We have erred and gone astray like lost sheep, having followed too much the devices of our own hearts. We have offended against the laws of nature, and have done things which we ought not to have done; and there is no HEALTH in us."

Rowley died in 1806, and the regard in which he was held was manifest in the crowds who flocked to his funeral. In the *Roll of Physicians*, Dr. Munk observes—

"Dr. Rowley was a determined opponent of Vaccination, and obtained an unenviable notoriety by his association with Dr. Moseley in opposing every conceivable obstacle to the reception and progress of that invaluable discovery."

The obstacles interposed were matters-of-fact, and as matters-of-fact were recognised and prevailed.

The controversy that followed the introduction of Vaccination "gave birth," says the Edinburgh reviewer, "to an infinite number of publications of all descriptions" from which he could only select the most characteristic. Among these we find Dr. Squirrell, whose book is described "as the most entertaining of the whole—

"We will venture to say, though we know it to be a bold assertion, that there never was anything so ill-written, or so vulgar and absurd, produced before by a person entitling himself a Doctor of Medicine. There is a certain nimbleness and agility about him, however, which keeps us in good humour, and he whisks about with such a self-satisfied springiness and activity, that it is really enlivening to look on him."

Turning up Dr. Squirrell's pamphlet* we find little or nothing to warrant this description. It is not ill-written, if judged by the standard of medical literature, and the "springiness" is a conceit of the reviewer's to sport with the Doctor's name. Our own impression is that Squirrell was a dull fellow, jealous of cow-pox as injurious to the trade in small-pox inoculation, and availed himself of the depression in the vaccination business to assert its superiority. He admits, indeed, that he kept silent during the Jennerian furore, "but the overwhelming torrent being gradually reduced to a feeble current," he reckoned that he "might now promulgate his opinion with a reasonable hope of success." He cites Jenner's account of the origin of cow-pox in the greasy heels of horses, and proceeds to argue that the disease is scrofula, which inoculation is certain to diffuse, whilst affording no protection from small-pox. He then adduces a number of cases in proof that inoculated cow-pox had not averted small-pox, and had in several instances brought on serious and fatal ailments. There is the woeful monotony of truth in these old pamphlets, not merely in the occurrence of small-pox after vaccination, but in the sadder stories of acute and chronic blood-poisoning. We recognise the narratives as true, for they are reproduced among us continuously by the same means, with the same miseries and agonies, and with the same death for grateful release.

It is clear from the testimony of Moseley, Rowley, and Squirrell, confirmed too by others and by the Jennerites themselves, that the extension of vaccination had met with a decided check in London. It was proved to many in a fashion that did not admit of dispute, that vaccination conferred no security from small-pox, whilst it was attended with dangers to health, certain if as yet undefinable. Variolous inoculation was again reverted to, but by diminished numbers; for that practice never had prevailed with popular good-will, but through sedulous medical persuasion as duty of dire necessity. Vaccination afforded excuse for hesitation, and, between rival claims, many contrived to elude either form of pollution. Thus indirectly as it were, vaccine inoculation set aside variolous, and when in 1840 the latter was forbidden by law, there was little of the practice left, whilst at the same time the majority of the population existed without Jennerian protection.

It is not to be forgotten that the early resistance to vaccination proceeded entirely from inoculators with small-pox. It was as yet unimagined that small-pox and other fevers were preventible, that their causes lay within easy control, and that health was the best defence of health. The world as yet lay in darkness as to those truths which we now recognise as laws of health, hygiene, and sanitary science; nor is the darkness rolled away, but is rolling away, and the time is not distant when to be vaccinated in order to be safe from small-pox will be accounted the drollest of absurdities.

Going back to the *Edinburgh Review*, we remark with curious interest how the chief position then asserted was the abiding efficacy of vaccination. Inoculators were ready to concede that it might possess a temporary prophylaxy, inasmuch as until one blood fever had

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* *Observations on the Cow-Pox showing that it originates in Scrophula, commonly called the Evil; illustrated with Cases to prove that it is no Security against the Small-Pox. Also pointing out the dreadful Consequences of this new Disease, so recently and rashly introduced into the Human Constitution.* By R. Squirrell, M.D., formerly Resident Apothecary to the Small-Pox and Inoculation Hospital. London: 1805. Pp. 76. A Second edition appeared in 1806.

subsided another was unlikely to supervene; but this view the reviewer declined to entertain—

"It seems contrary to all analogy, and all rules of reasoning to suppose, *à priori*, that an immunity which is found to subsist for a certain time in the usual and healthful state of the system, will gradually and insensibly wear away without any apparent cause, or any sensible change to indicate its extinction; and the facts which bear at all upon the question, so far from suggesting or supporting such a supposition, seem, in our apprehension, completely to refute and discredit it."

Yet what in 1806 was accounted "contrary to all analogy," and "completely refuted and discredited by facts," is precisely what vaccinators now admit. Hence their cry for re-vaccination—septennially, triennially, annually. Dr. Lionel Beale, a great authority in the matter, owned to having been vaccinated ten times, and in terror of an epidemic was about to be vaccinated once more—a striking exemplification of contemporary theory and practice. To have foreseen such an issue would have confounded the early vaccinators. When re-vaccination was first mentioned to Dr. Pearson, he denied its possibility; "for," said he, "Vaccination is equivalent to small-pox, which cannot recur. If a child can be re-vaccinated, then it can take small-pox; *ergo* vaccination is not an equivalent for small-pox; and where then is the good of it?" Where indeed!

The Edinburgh reviewer was sufficiently impartial to recognise violence alike among cow-poxers and small-poxers, and specified John Ring, Jenner's bully, as an offender, describing his *Treatise on Cow-Pox* as "one thousand and forty chaotic pages in defence of the new practice." Ring verified the criticism by issuing a stupid pamphlet, *The Beauties of the Edinburgh Review* alias *the Stink-Pot of Literature;* reminding us of the man who writing to his wife from an inn-parlour remarked, "I must conclude, for an unmannerly Irishman is looking over my shoulder and reading every word I write;" an observation that was immediately clenched with, "You are a liar, sir; a liar!"

KEIGHLEY.—It is always pleasant to hear from Keighley, and of the steadfast resistance of so many of the inhabitants to the vaccination delusion. The returns of Mr. John Gott, the vaccination officer, for the half-year ending June, 1880, are as follows—In Keighley 584 births, 74 successfully vaccinated, 74 died unvaccinated, 11 postponed, and 34 had removed out of the district. In Haworth there were 104 births, 88 were successfully vaccinated, 8 died unvaccinated, 4 were postponed, 3 were unentered, and 1 had been removed out of the district. In Bingley there were 328 births, 50 were successfully vaccinated, 32 died unvaccinated, and 246 were unentered.—We observe that one of the vaccinating Guardians has been complaining of the contemptuous bearing of his anti-vaccinating associates. It is difficult, we are aware, to refrain from contempt for manifest nonsense, but the attempt should be made. If we are so favoured as to be somewhat wiser than our neighbours, we improve our position by patience and forbearance toward those who linger in darkness.

OUR TRANSMISSIBLE DISEASES.

[Return relating to Deaths in England and Wales. Moved for by Mr. Hopwood and ordered by the House of Commons to be printed, 2nd September, 1880. Price ½d.]

A PARLIAMENTARY Return has been printed which throws much light on the cause of the great and widespread infantile mortality which perplexes the upholders of State medicine. We now learn that while the health of the general population has been materially improved by the enormous sanitary expenditure of the last thirty years in the abatement of filth nuisances and the purification of the water supply, the mortality among children under one year old still remains excessive, and is in fact almost unchanged. The main object of the Anti-Vaccinators in procuring this Return was to ascertain whether, and to what extent, the peculiar diseases now tardily acknowledged to be transmissible in vaccination have increased under our compulsory laws, and whether such increase is sufficient to account for the remarkable exception of infants from the effects of the general improvement in sanitary matters in which they might reasonably have been expected to participate. The information thus obtained from the Government is of the most startling character, and completely justifies the action of the Anti-Vaccinators in demanding its publication. We are now enabled to take the proportionate number of deaths of children under one year old in England and Wales for the seven years before vaccine compulsion, and compare it with those in the subsequent years down to 1878, in respect of several dangerous diseases, whose possible conveyance in vaccination is no longer seriously denied. The reader will observe that the figures give the proportionate number of deaths to each million of births. Thus we find that the deaths from scrofula have gradually and steadily increased, from an annual average of 350 per million of births, before compulsion, to the high rate of 1,104 and 1,153 per million in 1877 and 1878. The deaths attributed to "skin diseases" have also risen from an average of 170 to one of 870. The internal complaint called mesenteric disease has multiplied in a similar way from 2,981 to 4,442 per million. The dreaded syphilis has increased from an average of 565 deaths per million of births in the seven years before compulsion to an average of no less than 1,758 in the last seven years of the table, and the number of deaths in 1878 of infants under one year old from this terrible complaint rose to 1,851 per million of births! And what has caused the rise of infantile deaths under one year old from diarrhœa, which before compulsion were 11,600 per million of births yearly, and which from 1872 to 1878 averaged 16,340 yearly in each million? Infantile bronchitis has also advanced in the same way from an average of 5,130 yearly to the enormous number of 15,700. It was 4,641 per million in 1847, and 18,164 per million in 1878!

Is it consistent with any possible theory of duty to God or to man that these serious and heartrending figures should be passed over in supercilious silence?

H. D. DUDGEON.

THE INEQUALITY OF THE VACCINATION ACTS.

[*Speech of Mr. Tebb at the Annual Meeting of the Vigilance Association.*]

Mr. Tebb said he had listened with great attention to the speech of the Chairman (Mr. Jacob Bright), and especially that part of it which referred to the way in which important legislation was often forced through Parliament at the end of a weary sitting. One of the Acts to which he should like to refer was that which applied to compulsory medicine and which enforced a surgical operation—he meant the Vaccination Act. (Hear, hear.) It would be difficult to find any Act which ought to be more strongly condemned and opposed by such an Association as this. (Hear, hear.) If there was one instinct which was strong in the human race it was the love of offspring—out of that arose the desire to protect that offspring, to watch and guard it in every possible way, and to prevent all infection of disease or harm reaching it. This Act struck at the root of all this parental forethought—(hear, hear)—it took the child out of the hands of the parent and authorised an irresponsible officer, who gave no guarantee, to infuse into the veins of the child a poison, the dangerous effects of which could not be foreseen. (Hear, hear.) He held in his hand a Parliamentary Return which had just been published, which showed the fatal consequences of the system. This process of vaccination had the support of nearly the whole medical world, but that Return showed startling results, which were the outcome of this law. This official document dealt with mortality amongst infants, and was ordered by Mr. Hopwood—(cheers)—who had done so much to obtain the repeal of these Acts. (Hear, hear.) It would take him too long to analyse the figures, but he would simply state the fact that before the Vaccination Acts were passed in 1847 the deaths amongst young children from syphilis were 472 per million, but under that Act the number had increased fourfold, so that in 1878 they were 1,851 per million. (Hear, hear.) It was perfectly clear to anyone who would investigate the matter, and read the evidence of Mr. Brudenell Carter and Mr. Jonathan Hutchinson, that this terrible increase was owing to compulsory vaccination. (Hear, hear.) He arraigned this law also on account of its inequality, for it did not press equally upon all classes; it bore severely upon the poor, whilst it left the rich comparatively free to do as they liked. If the rich or well-to-do man objected to vaccination—what followed? He got certificates for the postponement of vaccination from time to time, until the officers forgot all about it. (Hear, hear.) His child could be taken into the country with the same result, or the vaccination officers "squared," to stop prosecutions. A case like that alluded to in the *Nonconformist* had occurred in his own neighbourhood. (Hear, hear.) But supposing the parent was in favour of vaccination, a most anxious consultation with the family doctor took place, and the operation was postponed until the medical man "had a good case"; the child was vaccinated, and if it was well taken care of it was possible but little harm might be done. The poor parents, on the contrary, were driven to the vaccination station, under the influence of threats of summonses, like sheep to the slaughter. A medical student who was obliged to attend a certain vaccination station told him that it was one of the most pitiable sights to go to one of these metropolitan vaccination stations and hear the parents beg the doctor to give only one mark, asking him anxiously if the lymph was good, and telling of the injury done to their own or their neighbours' children through vaccination. The Chairman, Mr. Hopwood, Mr. P. A. Taylor, Mr. Passmore Edwards, and other gentlemen present had laboured for the repeal of these laws, and last Session the Government, becoming alive to the inequality of the law, brought in a Bill to amend its stringency. No sooner was this announced than Mr. Dodson, the President of the Local Government Board, was literally besieged with deputation after deputation, petition after petition, begging the Government to withdraw the Bill, and the pressure brought to bear was so great that their prayer was granted.

Several gentlemen—Petitions from whom?

Mr. Tebb—Originating altogether from medical men. (Cheers.) Mr. Ernest Hart sent a petition to the entire members of the British Medical Society, begging them to sign it, and in a private note asked them to do so as an especial favour to himself. (Laughter and Hear, hear.) Several thousand medical men signed that petition, and what did they say at the deputation? Did they attempt to answer the statistical returns which had been issued? Nothing of the sort. (Hear, hear.) They merely said the Bill would be a license for the spread of small-pox; wholly ignoring the fact that in Prussia, where vaccination and re-vaccination were enforced, the epidemics were the most severe of any country in Europe; that Sweden, where vaccination had been longest enforced, the mortality was excessive, and that, on the other hand, in those countries where there was but little vaccination there was little small-pox. He was in Spain six weeks ago, and Mr. MacPherson, the British Vice-Consul, told him that the only severe attacks of small-pox he knew of were in the army, where vaccination was enforced. In Queensland, Australia, where there was no vaccination, there was no small-pox. This was a question so severely affecting the liberties of the poorer classes no efforts ought to be spared by the Vigilance Association to obtain a repeal of this Act. (Cheers.)

Medical Bias.—The motives of the medical profession in making their astounding statements about vaccination arise from three different kinds of bias. 1. The bias that arises from fear of losing vaccination fees. 2. The bias from fear of loss of credit to the profession if vaccination were universally acknowledged to be a delusion. 3. The bias from habits of mind of a life-time. This last bias is a very strong one, and often leads doctors and others to be really and honestly blind to deaths and injuries from vaccination simply because they have been brought up to look in other directions.—H. Strickland Constable.

ADDRESS OF DR. NICHOLS

To the International Anti-Vaccination Congress.

Gentlemen,—I have the honour to represent at this Congress the First Anti-Vaccination League of America.

The President of our American League is Mr. Alexander Wilder, M.D., F.A.G., Professor of Physiology in the United States Medical College, New York. Three Doctors of Medicine form its Executive Committee, one of whom, Dr. Gunn, is a Professor of Surgery, while the Treasurer, Dr. Holbrook, is Editor of the *Herald of Health*, a journal of Hygiene, having a large circulation.

The object of this American League is—"To awaken the attention of the public to the evils of vaccination and to its inutility, to put an end to the practice, and to prevent legislation for its enforcement."

There is not in America any general law of compulsory vaccination as in the United Kingdom of Great Britain and Ireland, and some countries of continental Europe. The Federal Congress has no power to enact such a law. It might make vaccination compulsory in the army and navy—perhaps in some branches of the civil service; but Congress has no such power over the great body of the American people, who make their own laws in the legislatures of their several States. The nearly fifty millions of the American people live in nearly fifty sovereign States, each having its own legislation. A compulsory vaccination law must, therefore, come before the legislature of each individual State, it must be discussed in public meetings and public journals, and in legislative committees. It may be adopted in one State, and rejected in another. I believe that no State legislature has yet passed a law of compulsory vaccination. It is the object of the American League to warn the people against the effects of such a law.

The compulsion that now exists in several States is through the action of the municipal bodies—the local legislation of towns, requiring that children attending the public schools should first be vaccinated. In the same spirit it has been proposed to exclude all unvaccinated children from public schools, thus punishing parents by fine or imprisonment, and condemning innocent children to perpetual ignorance.

The President of our American League, Professor Wilder, believes that "vaccination is physiologically and morally wrong," and the American people are coming to the same opinion. Public journals of high character have published the facts which English and Continental statistics have brought to light—that vaccination does not prevent small-pox—that in recent epidemics the small-pox hospitals have been filled with vaccinated patients—that in many cases a large majority of small-pox patients had been vaccinated, and in some cases a majority of those who died of the disease were supposed to be protected by vaccination.

The failure of vaccination to protect from small-pox is now too notorious to be denied. Its advocates admit it by their demands for repeated and frequent vaccinations. But we go much further than this declaration and proof of inutility. We declare that vaccination is dangerous; that it often destroys health, and shortens life. To vaccinate is to communicate disease, and such disease is always an evil, and sometimes quickly fatal. In England many children die of vaccination. Many more are seriously diseased. It is admitted by the medical faculty that syphilis is propagated by vaccination. It is notorious that vaccination is followed by fatal erysipelas. I have seen cases of scrofula and skin diseases which could be attributed to no cause but vaccination. In short, I believe that every contagious, hereditary or communicable disease, may be propagated by vaccination. Into the pustule of the vaccinated patient gathers the germs of disease, ready to be transferred to others, and by this process diseasing germs are spread through a whole community, so that the children of healthy parents become filled with the disease of those born in less fortunate conditions. And no physiologist will deny the probability that every hereditary disease may be communicated and sown broadcast by vaccination. The survival of the fittest is made impossible by making all equally unfit. Can it be wondered at that parents should resist, even by force, if needful, a process of blood-poisoning which may fill their children with the foulest diseases? It would be inhuman not to oppose such a law. Vaccination is a risk which no government has a right to compel a parent to put upon his children. A man may give his life to save his country, but that he should sacrifice the lives of his children for a medical theory is what no government has a right to require, and the American people, instructed in the facts of vaccination, will join the nations of Europe in resisting the tyranny of a blood-poisoning, disease producing, death dealing legislation. We hope the Congress of Paris will result in the formation of an International League for the repeal of all laws compelling vaccination, and for the enlightenment of all peoples in the science of health, the real and sufficient protection against all epidemic diseases. The true remedy for small-pox and all other diseases is health. To vaccinate is to disease. We ask that our protest against compulsory vaccination may be heard in the International Congress of Paris.

For the American Anti-Vaccination League,

Thomas Low Nichols, M.D.

Dr. Allbutt of Leeds delivered a lecture at Bradford entitled "Vaccination Defended and Proved against all Comers," on Sunday, 20th Feb. He said he firmly believed that if vaccination were thoroughly carried out, it would in the course of a few years abolish small-pox, but did not explain why, when thoroughly tried, it failed to do so. There was a large attendance of anti-vaccinators, and, in the discussion which followed, they gave a good account of themselves. It is intended to have a two night's debate at Keighley in October between Dr. Aldbutt and Mr. Alexander Wheeler, on the claims made and the facts proved concerning Vaccination. Nothing could be better. Truth, like a torch, the more it's shook it shines.

THE "SCIENTIFIC PRINCIPLE" OF VACCINATION

ACCORDING TO THE PRESIDENT OF THE ROYAL SOCIETY.

Derry Lodge, Darlington,
Feb. 19th, 1881.

To the Right Hon. J. G. DODSON, M.P.,
President of the Local Government Board.

SIR,—In November last the President of the Royal Society addressed the Fellows and said, *inter alia*:—"Among the subjects which at one period of the late session of Parliament engaged the attention of the Government was that of the law relating to vaccination, and a Bill was introduced intended to remove some of the practical difficulties in carrying out the existing law. While fully admitting the difficulties in question, the remedy proposed appeared to trench so closely upon the application at least of *a scientific principle*, and at the same time to be so important in its practical aspect, that I ventured (although the Council was not sitting) to consult the Presidents of the Colleges of Physicians and of Surgeons, and that of the Medical Council, about addressing the Government on the subject. This resulted in a joint deputation to the President of the Local Government Board, in which I took part as President of the Royal Society. I reported this matter to the Council at their first meeting after the recess, and received their approbation. The Bill in question was withdrawn."

You will easily imagine that I read this with particular interest, and you will no doubt readily recall the circumstances mentioned. As well as I remember, you did not allow the representations of this deputation to alter your course in Parliament. I do not know what impression was made on your mind by the statements of so many eminent men, but you will now see by the subjoined letter of the President of the Royal Society that the practice of vaccination has no sound basis, and that the much exalted "scientific principle" is only the "baseless fabric of a vision," the unreality of which is demonstrated by the very least exertion in the direction of close investigation.

I do hope that, seeing these things are so, you will yet be favoured with the power to give your support to efforts made to secure for the people freedom in this matter.

I fully appreciate the difficulties of the official position, but I am quite sure that the simplest and easiest way to meet the inevitable change of opinion is to repeal the compulsory clauses of the Vaccination Acts.—I have the honour to be your obedient servant,

GEORGE S. GIBBS, F.S.S.

G. S. GIBBS TO DR. SPOTTISWOODE.

Derry Lodge, Darlington,
Jan. 26th, 1881.

SIR,—I trust you will excuse my freedom in thus addressing you, but the matter is a public one, and the speech of the President of the Royal Society must be regarded as a public speech.

In the report given in *Nature* of December 2nd, 1880, of your address delivered 30th November, I read—"Among the subjects which at one period of the late session of Parliament engaged the attention of the Government was that of the law relating to vaccination, and a Bill was introduced intended to remove some of the practical difficulties in carrying out the existing law. While fully admitting the difficulties in question, the remedy proposed appeared to trench so closely upon the application at least of a scientific principle, and at the same time," etc., etc.

I wish now to ask you kindly to spare me a few moments to state what is the scientific principle here mentioned. By so doing you will very much oblige—Yours truly,

GEORGE S. GIBBS.

DR. SPOTTISWOODE, F.R.S.

DR. SPOTTISWOODE TO G. S. GIBBS.

41 Grosvenor Place, S.W.
Feb. 1st, 1881.

SIR,—The principle to which I referred was that of vaccination. Whether others agree with me in considering it scientific or not, I cannot of course say. But I would venture to point out that my address was made to the Fellows of the Royal Society; and, although published in their proceedings, was not of the nature of a public speech. You must therefore pardon me if I do not enter into further correspondence on its contents.—I remain, Sir, yours faithfully,

G. S. GIBBS, Esq. W. SPOTTISWOODE.

G. S. GIBBS TO DR. SPOTTISWOODE.

Derry Lodge, Darlington,
Feb. 5th, 1881.

SIR,—I am much obliged by your letter of the 1st, though I dare say you will not be surprised to learn that I had as little satisfaction in reading as I imagine you had in writing it.

I should be sorry to appear desirous of continuing a correspondence contrary to your wishes, but must respectfully demur to your plea that your address should be regarded as private. The fundamental object of its delivery must have been to influence public opinion; it was therefore quite fitting that it should be published in the newspaper where I found it, and this seems the more appropriate with regard to the paragraph to which I referred, since the latter part, which I did not quote, describes a public act, performed with a distinct and express desire to influence the course of public events.

The answer given in your letter to my simple question is equally wide of the mark.

That the subject of the paragraph was vaccination was plain enough, but vaccination is a practice, not a principle, and I really hoped when writing that you had some idea in your mind of a "scientific principle" on which the practice is based, as I have not unfrequently heard such a thing mentioned, and it seems to be more or less extensively believed in, though

I have never yet been able to get anything approaching to a definition worthy of respect.

Under these circumstances, you must permit me to express my deep and unfeigned regret that you should have placed the influence of your extensive knowledge and exalted position in the scale against the earnest and not altogether ignorant, though much maligned, endeavours of some of your fellow-countrymen to obtain the abrogation of a cruelly oppressive law, which tends to spread disease of almost all kinds without yielding the least countervailing benefit.—I remain, yours truly, GEORGE S. GIBBS.

DR. SPOTTISWOODE, F.R.S.

MR. DODSON TO G. S. GIBBS.

Local Government Board, Whitehall,
February 23rd, 1881.

SIR,—Mr. Dodson desires me to acknowledge the receipt of your letter of the 19th on the subject of vaccination.—I am, Sir, your obedient servant, HUGH F. SEYMOUR.

G. S. GIBBS, Esq.

VACCINATION AND MATRIMONY.—(From *The Cosmopolitan*)—"Dear Sir,—I have been engaged to marry a charming girl for more than two years. The doctor has induced her to be re-vaccinated, and she is now covered with disgusting eruptions. Am I bound to keep my promise of marriage? I do not want to wed a body of disease, and become the father of diseased children.—Respectfully yours, HEALTH."

THE EFFECTS OF VACCINATION.—The effects of vaccination on human beings are identical with its effects on animals. If the child is healthy, has a full stock of vitality, a free circulation, large lungs, and an active skin, the poison will take a centrifugal direction, and be thrown off through the pores of the skin, by the action of the fever attending the operation of vaccination. The pox on the arm will be comparatively painless, and but little inflammation will be observed; and the unnatural ferment which the poison sets up in the blood, will be thrown off from the body more or less completely. But let the patient be of a different temperament, where the natural heat is low, where the vital power is deficient, the lungs constricted, the skin deficient in tone, and where the tendency of the blood is to flow towards the nervous centres rather than towards the surface, then very different results will be observed from vaccination. The vaccine poison will establish its murderous ferment in the child's blood. A fever ensues, but it is of a low type; and instead of the poison being expelled through the skin, it accumulates in certain organs, and erysipelas, swellings, abscesses, consumption, mesenteric disease, and many other evils, are the immediate consequence. When the vital power is too low to produce acute symptoms, the poison lingers in the system—causing consumption and low fever later in life. For be it remembered, that it is not a mere speck of "lymph" in the blood which the system has to combat with. This speck of "lymph" resembles yeast, or barm, put into dough; and it changes the whole mass of the blood into its own peculiar nature; and thus the system has a tremendous task to perform before it can assume its former healthy tone; and in some cases it never can.—JAMES BURNS, O.S.T.

MR. GERALD MASSEY in his new work *A Book of Beginnings* refers to vaccination with detestation, especially in its application by Christian missionaries to savage races. It is "a filthy fraud" that fitly accompanies rum and rifles and other appliances of degradation and destruction.

WHY DID HE DIE?—We learn from later accounts that Commander the Hon. H. N. Hood, of her Majesty's ship Pegasus, who died at Shanghai on 3rd February, suffered from small-pox in the confluent form. Vaccinated and revaccinated, fortified with the whole virus of cow-pox, we again ask, Why did he die?

THE LONDON SOCIETY CONFERENCES.—The *Boston* (United States) *Courier* for the 27th February, after a quotation from Mr. Tebb's address, closes an appreciative notice of the proceedings of the second monthly Conference at Anderton's Hotel, London, by saying that "both in this country and in Europe the feeling against the practice of vaccination is rapidly gaining ground, and at no distant day we look to see the laws upon the subject modified if not abrogated altogether."

MR. HOLLOND, M.P. FOR BRIGHTON.—On 22nd March a deputation of anti-vaccinators led by Mr. Harris, Mr. Pocock and Mr. Ashwell waited on Mr. Hollond in the conference room of the House of Commons, and committed to his care a petition in support of Mr. P. A. Taylor's Bill for the repeal of the Acts which enforce vaccination. It was pointed out to Mr. Hollond that the petition bore 8,900 signatures, and was signed in many places by the inhabitants of streets in almost unbroken sequence, and that with more labour and time the signatures might have been doubled. Also, that so strong and growing is the resistance to enforced vaccination in Brighton, that the next parliamentary election will be determined on that issue. Mr. Hollond's education on the question is in progress. He declined to take the chair at a meeting of his constituents in opposition to vaccination. He is willing to vote against repeated penalties for non-vaccination, but does not yet see his way to the abolition of compulsion.

WARM WATER CURE.—In the *Gentleman's Magazine* for 1748 we read that in Upper Hungary small-pox was treated with great success after the following method—"As soon as an unnatural heat denotes small-pox, the patient is put into a bath of common water, moderately hot, where he is left for half an hour. He is then wrapped in warm clothes and carried to bed. At night the bath is repeated, and not only until the eruption of the pustules, which commonly happens after the second bath, but even to the very time of their maturation, which is generally effected on the third day after the eruption. Then the only alteration in the method is that instead of water for the bath, whey is used, or fresh milk with an equal quantity of water. By this regimen suppuration is brought about very quickly, so that the pustules scale off on the fourth day without leaving any scars, or being attended with any of those accidents which render small-pox so formidable. Dr. Fischer has written a Latin treatise on this method, in which he confirms the observation of the mountaineers, that none of the patients treated according to this rule ever die of small-pox, nor are they exposed to any of those misfortunes with which other methods are so often attended."

CALF LYMPH ON THE WAY.

On 17th March, Dr. Cameron asked the President of the Local Government Board whether any steps have been taken to give effect to his promise, made on the 11th of June last, that the Vaccination Department should supply calf lymph as "stock" for vaccination to such medical practitioners as preferred it to ordinary humanised lymph; and whether, in view of the alarming spread of small-pox in London, the department would consider the propriety of taking measures to secure a sufficient supply of vaccine lymph for the purpose of revaccination. Mr. Dodson—Yes, sir; steps have been taken in pursuance of that promise. Careful inquiry has been made by the medical officers of the Local Government Board as to the arrangements in Belgium and elsewhere for the supply of calf lymph, and we have been engaged for some time in endeavouring to find suitable premises for an establishment in the metropolis. This has been a matter of some difficulty, but I am happy to say that the matter has so far progressed as to enable me to appoint a medical director for the establishment, and to arrange with the Treasury as to the staff. In answer to the last question, I have already stated that the department is not intended to supply a sufficient quantity of lymph for revaccination. The object for which the National Vaccine Establishment was set up was to supply a certain quantity of lymph for the purposes of primary vaccination.

Mr. P. A. Taylor gave notice that he would ask the President of the Local Government Board if he would state to the House the source whence the new animal lymph was to be obtained, whether the calves were now inoculated from a diseased horse, or from a human being suffering from small-pox, or from what other source.

It is said in the *Lancet* of 19th March—"We are informed that Dr. Cory has been appointed Director of the Government Animal Vaccine Station in progress of establishment in London. On Tuesday last, accompanied by Dr. Cameron, M.P., he inspected Dr. Cook's Vaccine Farm at Manningtree, Essex."

Hydrophobia.—There is great satisfaction in terrifying and being terrified. A year or two ago Glasgow was in a panic about mad dogs. Many were bitten, and dogs were slaughtered wholesale, but there were only three deaths from hydrophobia, induced, it was suspected, as much by fear as by virus. In the Report of the London Home for Lost Dogs we read that during the past year twenty-seven dogs suspected of being affected with rabies were sent to the Home by the metropolitan police, and reported as having bitten several persons. They were kept under surveillance and separated from other dogs for periods of seven to fourteen days, but in no case had hydrophobia resulted from these bites.

The Rev. Mr. Archdall of Glannire was summoned before the Riverstown magistrates at the suit of the Cork Guardians for not having his child vaccinated. In reply Mr. Archdall said that he had himself been vaccinated, but did not escape severe small-pox; that he did not intend that his child should undergo the same useless and dangerous operation; and that he expected Parliament would presenlly repeal the oppressive law. The Bench replied that at present they had no option, and must impose a fine, which they fixed at 2s. and costs.

THE LAST NOVELTY IN LYMPH.

We read in the *Lancet* that Mr. J. Lawrence Hamilton proposes to introduce an abundant supply of pure artificial lymph, produced outside the body of living man or living animal, by isolating and then breeding the vaccine organisms in suitable germ nutritive solutions which have been previously deprived of all septic and other noxious germs. The publication of the special precautions and physical conditions which Mr. J. Lawrence-Hamilton considers necessary to secure safety and success in breeding, and then in employing the artificial vaccine lymph, as well as the results of therewith inoculating men, cattle, and other animals, will be postponed till a subsequent date.

Vaccination Fables.—Dr. J. W. Miller delivered a lecture on Vaccination to the Dundee Naturalists' Society which, judging from a report in the *Dundee Advertiser*, must have been a miracle of *mis*-information. He started with the statement that "*small-pox mortality in Europe during last century used to average 500,000 per annum*," and ended with ascribing the continuance of the disease at this day to "*the multitudes who remain unvaccinated in our large cities.*" With such a beginning and such an end, it is needless to specify the absurdities that lay between.

Oldham.—The Guardians have resolved to limit their procedure to a single prosecution for non-vaccination. There was a correspondence with the Local Government Board on the subject, and though the Board declined to advise, it was clearly indicated that the determination come to would not be objectionable.

Bedford.—There are many anti-vaccinators in Bedford, and most of them have been prosecuted and fined. But the fine usually imposed is 6d. without costs, and the Guardians have written to the Magistrates complaining that the costs should be borne by ratepayers who obey the law. If this course is continued, they say, they will have to consider the advisability of ordering any further prosecutions for non-vaccination.

A Vaccinator in Chelsea Schools.—Of 4,512 children examined by Dr. Rowland in January and February he reported 303 "in an unsatisfactory state as to vaccination. Of these 146 were either unvaccinated, or had not been successfully vaccinated, and 157 had either no distinctive marks, or showed insufficient evidence of protective vaccination." This examination was very properly cut short by command of the London School Board.

Another Much Vaccinated M.D.—"Medicus" writes to the *Globe*—"Being deeply impressed with the necessity of re-vaccination, I requested my cook to take her daughter, aged 10½ years, to the parish vaccine station, on the day and at the hour appointed by the Public Vaccinator. My cook informed me, on her return, that the gentleman declined to vaccinate the child, saying that there was no need for it until she was twelve years old. This statement amounts to a declaration that no person under the age of twelve is liable to infection from small-pox. Will the hospital statistics support this statement? *I am myself regularly vaccinated every four or five years*, and generally with success."

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 26.] MAY, 1881. [Price 2d.

NOTES OF THE MONTH.

The report of the inquiry by Dr. Stevens as to the death of a child from vaccination at Sandown, Isle of Wight, is instructive and characteristic of the medical mind. To dispatch Dr. Stevens to report on a vaccination disaster, is like asking an alderman to report on civic extravagance, or a monopolist on free trade. It is foolish to require of a man that of which he is constitutionally incapable. Dr. Stevens has made up his mind: vaccination is for him settled and sealed for evermore. His remark in summing up the inquiry, "It is altogether out of the question that vaccination had caused the pyœmia," expressed a conviction that no evidence was ever likely to disturb. A greater official than Dr. Stevens once observed, "Whatever you may say or prove, I shall never surrender my faith in vaccination." We have to take account of, and allow for, convictions thus indurated in every department of life; but it is hard to have a judge set up whose decisions may be predicated with absolute certainty before they are delivered. We do not say it unkindly, but as mere matter of observation, that it is inconceivable that Dr. Stevens could deliver judgment on any vaccination question in a sense adverse to the efficacy and harmlessness of the rite. When, therefore, we hear he has gone anywhere to investigate, whilst we may be thankful that the facts will in some measure be elicited authentically, we have for his conclusion the indifference of fore-knowledge.

Mr. Joseph Abel has answered to his 85th summons, and his fines now amount to £43 6s. 9d. As for the Faringdon justices, words are wasted on them. They have long ago illustrated the observation—

"Take it as a rule,
No creature smarts so little as a fool."

What we have to ask in presence of the case is, How compulsory vaccinators like such a demonstration of the character of their law. Whether they think it redounds to the majesty of justice that its officers should be confronted with immovable and triumphant disobedience—with disobedience, moreover, that commands the approval and sympathy of men and women, good and true, throughout the community, who regard Abel as a sufferer for their sakes, and pray that he abide steadfast to the end. What they think of lending out pains and penalties at discretion to such men as these Faringdon worthies, who are, we daresay, honestly persuaded that they are serving the sacred cause of vaccination by their dogged vindictiveness. Whether they think it fair that immunity from vaccination, which has cost Mr. Abel £43 6s. 9d., may be had in other parts of England at prices ranging from 6d. to 20s. Lord Walsingham, who was simple enough to act as promoter of the Vaccination Act, assured Mr. Young "that it was in no degree the intention of the measure that prosecutions in cases of conscientious objections to compulsory vaccination should be carried to the extent of persecution." Hell, it is said, is paved with good intentions, but good intentions in legislation are of no service even as pavement—unless as pavement towards mischief. We see in Mr. Abel's case that it is not what legislators *mean*, but what they *enact*, that has to be reckoned with.

Mr. Tebb's account of his visit to Dr. Renner's Establishment for Vaccination with Calf-Lymph will be read with amusement, amazement, and disgust. The whole thing is a curious survival of mediæval superstition, not in form of course, but in spirit and method. The culture of disease to generate health, the perverse logic, the indifference to obvious evidence, the blind confidence in the original cow at Liège, the uninterrupted current of the veritable filth, with its various intensities expressed in a graduated tariff, all remind us of similar combinations of pedantic absurdity and semi-con-

scious imposture with which medical history abounds. Vaccination is sometimes described as a triumph of science, but in any accurate sense, science has had no more to do with it than with blood-letting, purgatives, and scores of other mysteries of medical art. We invoke science to overthrow this superstition, as science has overthrown many other superstitions; nor shall we invoke science in vain. Vaccination might have long remained a medical mystery, but the determination of the craft to impose it on the whole community, has transferred it from the realm of professional mystery to a matter of universal concern, whilst its universal infliction has produced mischiefs of such magnitude that they can be no longer concealed. Indeed these Calf-Lymph Establishments, private and parliamentary, are open confessions of the hitherto denied dangers of ordinary vaccination.

Dr. Richardson in his lecture at the Sanitary Institute on 18th April, said not a word about vaccination. He confined himself entirely to the advocacy of parish hospitals for the treatment of small-pox and fevers, condemning monster hospitals as not only prejudicial to recovery and to natural affection, but as withdrawing from parishes the cognizance and responsibility for diseases generated within their bounds. His views were fiercely contested by Dr. Collie. He maintained that if each patient in a large hospital had the same cubic space as in a petty hospital, with equal attendance, it did not matter in the least what was the number of patients, whether five, five hundred, or five thousand—a position, we feel sure, that experience can never verify. He endeavoured to account for the excessive mortality of large hospitals by saying that it was severe cases that were sent to them, the mild being kept at home—as if it were known in advance, whether any case was to prove severe or mild, or as if the great mass of hospital cases were not drawn from the lowest grades of the community, who, whether mildly or severely affected, are invariably conveyed to hospitals in the event of serious illness. Further, Dr. Collie challenged any one to prove that a large hospital diffused infection. The Homerton Hospital was adjacent to a populous work-house, the windows of both buildings being frequently open at the same time, but not one case of small-pox in the workhouse had originated from the hospital. We do not dispute the assertion, but if true, what is to be said of the alarm, diligently fomented by medical men, when a case of small-pox is reported in any neighbourhood? We have two doctrines set before us, First, small-pox is frightfully infectious when vaccination and re-vaccination have to be recommended, and Second, there is no danger of infection whatever when the existence of monster repositories of small-pox are attacked as nuisances. Mr. Collins complained that the question of vaccination had been excluded from consideration; but Dr. Richardson replied that he had purposely omitted it from his discourse, and that it was reserved for another occasion. We trust that Mr. Collins will see that an occasion is speedily found. There is a strong and natural reluctance in medical circles to bring vaccination under discussion. It answers much better to have it accepted as something which only fools and fanatics can contest.

We had thought the *Times* was closed against the truth about vaccination, but we are glad to see that Mr. Taylor has found entrance on several occasions lately, and especially to dispose afresh of the monstrous statement that the mortality from small-pox among the unvaccinated is 44·4 per cent., whilst among the vaccinated it is only 8·8 per cent. We once heard this rough and ready reply to the asserted mortality of 44 per cent. among the unvaccinated—"Then they must have been murdered; for a hundred years ago when all were unvaccinated the mortality used to be 18 per cent." Wilful homicide we put out of the question, though it usefully emphasises the absurdity imposed on the public credulity. We have to inquire who are the unvaccinated who die at the prodigious rate of 44 per cent.? and whether all severe cases received in small-pox hospitals with the vaccination marks obliterated by eruption are not registered as unvaccinated? The bias in favour of vaccination is so strong that virulent and confluent cases of small-pox are taken as matter of course for unvaccinated. Anyhow no one possessed with a spirit of candour or science can put forward such statistics and stand by them. They are obviously outrageous. When, on the other hand, we take the total hospital mortality, we find that it is 17·6 per cent., or almost precisely that of a hundred years ago, indicating, as we suspect is the fact, that the disease, on the large scale, operates unchanged. One of the worst mischiefs of vaccination is that it has begotten an illusory confidence and withdrawn men's minds from the causes of small-pox, and from methods of treatment and nursing that would multiply cures.

SPECIAL attention is invited to the Annual Meeting of the London Society for the Abolition of Compulsory Vaccination to be held in Neumayer Hall on Wednesday, 18th May, at 7.30 o'clock, Mr. P. A. Taylor, M.P., President of the Society, in the chair. Professor F.W. Newman, Mr. Alex. Wheeler, and other friends of the movement are expected to be present. Neumayer Hall is a pleasant and commodious assembly-room, recently erected in Hart Street, Bloomsbury, close to Oxford Street and the British Museum. Tickets for reserved seats may be had of Mr. William Young, Secretary, Gray's Inn Chambers, 20 High Holborn, W.C.

SIR WILFRID LAWSON speaking at Carlisle said, My friend, Mr. Ferguson, has told you that he is a man free from crotchets. I am a man who abounds in crotchets. I don't know how it came about that two members who generally agree so well on political subjects should be so different in their temperaments; perhaps it arose from the fact that I was not properly vaccinated. (Great laughter.) The operation did not take; it did not succeed in eliminating from my system those crotchets which it has cleared out of Mr. Ferguson. (Renewed laughter.)

PROFESSOR MAYOR writes, "The history of medicine seems to me, in a great degree, the history of human folly. Now, above all, when all feeling of pity is destroyed (by vivisection, boiling and baking dogs, etc.) in those who are to go forth on an errand of mercy, it is time for the laity to arm themselves with a knowledge of the laws of health. Surely the clergy of all denominations might be taught, as a part of their professional training, how to avoid disease. Then, in a generation or two, surgeons and officers of health would remain, but drug doctors would have died away for want of custom."

LEEDS LAW AND PRACTICE.—Mr. Holmes, vaccination officer, being asked at the Board of Guardians why he had summoned Mr. Appleyard for the third time for neglecting to have his children vaccinated, thus explained his practice. He had a rule to this effect—if a man was summoned once and fined, he let him alone until another child was born, as in the case of Appleyard. Then, if he neglected to have the second child vaccinated, he was summoned and fined in respect of that, and so on with the third and any children born subsequently. He considered that a fair and just rule, and not an arbitrary one. Mr. Exley asked what Mr. Holmes would do in the event of a second child not being born if the parent neglected to have his child vaccinated after having been fined.—Mr. Holmes: I should let the case rest, as I think it is not wise to prosecute too much. There is nothing in the Act of Parliament requiring me to summon a person more than once in respect of one child. I could do so, but I am not compelled by law.—Mr. Exley said it seemed to him unfair that a man who was fortunate or unfortunate enough to have a large family should be summoned in respect of each child, while a man who had one child should only be summoned once. A discussion followed, but apparently Mr. Holmes's practice and interpretation of the law were left unaffected.

THE STORY OF A GREAT DELUSION.

CHAPTER XXVI.

JENNER AND WALKER IN LONDON.

IT may be asked, Why if Vaccination was proved useless and injurious was it not entirely discontinued? but the question implies a logical consistency which is rarely exemplified in human experience. Vaccination was discontinued, but it was not entirely discontinued: it was chiefly continued among the upper and middle classes where fees were to be had for its performance. It was admitted that the rite might not prevent small-pox, but it would make it milder. The last thing a medicine man admits is, that he is helpless and can do nothing. Even in presence of that for which there is no remedy, it tends to his importance, and the satisfaction of the patient, and those around the patient, to make believe to do something. Now for small-pox, there was no preventive. Its causes were unknown. It broke out, and it disappeared, none knew how. Jenner's household was devastated with fever, but he never asked, why: he accepted the dispensation like so much bad weather. Whether fevers were avoidable, or whether they were consequences of ill living, were questions as yet outside cognizance. The predominant thought about small-pox was, that it might be dodged, be it from God or devil. Inoculation with small-pox was a dodge with disagreeable accompaniments: inoculation with cow-pox was a dodge on easier terms: by a trick, that left every evil circumstance unaffected, small-pox was to be got rid of. In the nature of things, the dodge was ineffective—mercifully ineffective; for who that is wise would care to have the consequences of evil abated save by the putting away of evil? The dodge proved illusory in the presence of those who recommended it, but whilst a manifest failure as to the main intention, they had the craft to shift its efficacy to rendering the disease milder—a claim as to which no test was immediately available. Moreover, vaccination had the merit of action, which the quack, whether lay or professional, insists on at all hazards. To confess ignorance and inability is self-denial for which the quack temperament is unequal, as whoever is ailing and has friends may perceive. All come bearing advice and prescriptions for the control of nature, when, with simple quiescence and a right disposition of circumstances, nature is instant to effect recovery.

The failures of vaccination to prevent small-pox were chiefly visible among the poor, small-pox being predominantly an affliction of poverty; but in 1811 a case occurred in aristocratic life which produced more talk and dismay than scores of similar cases among trades-folk and artizans. Robert Grosvenor, son of Earl Grosvenor, vaccinated by Jenner in 1801 when a puny babe of a month old, fell ill on 26th May, 1811; in a few days small-pox developed, became confluent, and the lad narrowly escaped with life. There was no mistake about the vaccination; the mark on the boy's arm indicated "the perfect disease"; he was attended

by Sir Henry Halford and Sir Walter Farquhar, and was visited by Jenner, who happened to be in town; and, in short, the evidence of the impotence of vaccination to avert small-pox was complete and indisputable. The commotion was intense, and in a letter from Jenner to Baron we see how it affected his mind. He wrote—

"Cockspur Street, Charing Cross,
11*th June*, 1811.

"My Dear Friend,—It will probably be my lot to be detained in this horrible place some days longer. It has unfortunately happened, that a failure in vaccination has appeared in the family of a nobleman here; and, more unfortunately still, in a child vaccinated by me. The noise and confusion this case has created are not to be described. The vaccine lancet is sheathed; and the long concealed variolous blade ordered to come forth. Charming! This will soon cure the mania. The Town is a fool—an idiot; and will continue in this red-hot—hissing-hot state about this affair, till something else starts up to draw aside its attention. I am determined to lock up my brains, and think no more *pro bono publico*; and I advise you, my friend, to do the same; for we are sure to get nothing but abuse for it. It is my intention to collect all the cases I can of small-pox after supposed security from that disease. In this undertaking I hope to derive much assistance from you. The best plan will be to push out some of them as soon as possible. This would not be necessary on account of the present case, but it will prove the best shield to protect us from the past, and from those which are to come.—Ever yours, Edward Jenner."*

The defence, therefore, was, that as an attack of small-pox did not always avert a second attack, it was not reasonable to expect that vaccination should be more effective; and to make good this position, a diligent search was instituted for cases of repeated small-pox. Many were found, though they were generally regarded as rarities, whilst their reality was frequently disputed; but whatever their number or genuineness, they were insignificant in comparison with the instances of small-pox subsequent to vaccination. Moreover, the Jennerites were taunted with their late discovery of small-pox after small-pox. Why had they not stated from the outset that small-pox might follow vaccination as small-pox followed small-pox? Why, on the contrary, had they asserted vaccination to be an absolute and life-long defence against small-pox? Why had they abused as fools or denounced as liars all the early reporters of small-pox after vaccination? And why did it require evidence, that could not possibly be wriggled out of, to bring them to an acknowledgement of the truth?

But even in presence of such evidence, Jenner persisted in his asseverations as if he had lost the very sense of truth. Writing to Miss Calcraft on 19th June, 1811, he actually claimed that he had foreseen and predicted such disasters as had occurred in the Grosvenor family! Here are his words—

"Take a comprehensive view of vaccination, and then ask yourself what is this case? You will find it a speck, a mere microscopic speck on the page which contains the history of the vaccine discovery. In the very first thing I wrote upon the subject, and many times since, I have said the occurrence of such an event should excite no surprise; because the cow-pox must possess preternatural powers if it would give uniform security to the constitution, when it is well known that small-pox cannot; for we have more than one thousand cases to prove the contrary, and fortunately seventeen of them in the families of the nobility."

Obviously had such been his uniform testimony, the Grosvenor incident would have excited neither surprise nor alarm; and mark this additional hardihood—

"Indeed, I have often said it was wonderful that I should have gone on for such a series of years vaccinating so many thousands, many under very unfavourable circumstances, without meeting with any interruption to my success before. And now this single solitary instance has occurred, all my past labours are forgotten, and I am held up by many, perhaps the majority of the higher classes, as an object of derision and contempt. . . . What if ten, fifty, or a hundred such events should occur? they will be balanced a hundred times over by those of a similar kind after small-pox."

Whilst thus he maintained that it was no more extraordinary that young Grosvenor had small-pox after vaccination than that others should have small-pox after small-pox, he went on to assert that vaccination had saved the lad's life!

"The child would have died (that is universally allowed) but for the previous vaccination. There was but little secondary fever; the pustules were sooner in going off than in ordinary cases; and, indeed, the whole progress of the disease was different. It was modified and mitigated, and the boy was saved." *

Such was the *mot d' ordre*. If Grosvenor had not been vaccinated, he would have perished! The National Vaccine Board reported on the case to the same effect, and the faithful suffered themselves to be re-assured.

In connection with 1811 and London small-pox, there is a letter to Dr. Lettsom which throws still farther light on Jenner's temper and philosophy. He wrote—

"Cheltenham, 22*nd November*, 1811.

"I have considered London as the centre of opposition to the vaccine practice; but even there, in spite of the base and murderous designs of a few bad minded individuals, the small-pox has wonderfully decreased; and in the provinces its mortality has lessened in a still greater proportion. For the great and grand effects of Vaccination the eye must quit this little spot, and survey it among other European countries, and still more particularly among the vast empires of Asia and America. In Mexico and Peru the disease is nearly extinct. The documents which pour in upon me from these distant regions fill me with inexpressible delight. You shall have copies when I can get them transcribed.

"The chief impediments to the general adoption of Vaccination in England are, I am confident, our newspapers and some of our magazines. Whenever a case of what is called failure starts up, in it

* Baron's *Life of Jenner*, Vol. ii. p. 161.

* Baron's *Life of Jenner*, Vol. ii. p. 158.

goes to a newspaper, with all the exaggeration with which envy and malice can garnish it." *

Was there ever a more delicious bit of self-revelation! The wicked newspapers! The base, murderous and bad minded enemies of vaccination! The small-pox of London reduced by vicarious vaccination in spite of its ingratitude! The consolation derived from the survey of the countries of Europe and the vast empires of Asia and America with inexpressible delight from Mexico and Peru! Not Mrs. Jellyby herself lost in an atmosphere of Borrioboola-Gah is more piquant.

Jenner's reference to the good effects of vaccination in London was curiously inconsistent. That vaccination in which he professed to rejoice was chiefly the work of Dr. John Walker, whose practice he had denounced as so widely at variance with what he considered correct, that even the wreck of the Royal Jennerian Society was not thought too heavy a price to pay for deliverance from complicity with him. The London Vaccine Institution, established in 1806 by Walker and his friends, was responsible for the large majority of vaccinations effected in the metropolis. Walker was a pure enthusiast, of boundless energy, with a craze for vaccinating. Adverse results had no effect upon him: he did not deny, but simply did not recognise them, and held on prophesying and practising with mechanical persistency. Nevertheless, he ran aground. The income of the Institution had dwindled to less than £100 a year when Andrew Johnstone, a Cumberland man, a school-fellow of Walker, came to his assistance. With a commercial eye he surveyed the situation. He perceived that though vaccination had fallen into disrepute, there remained many believers who only required stirring up and solicitation to provide funds to keep Walker going and to yield the collector a satisfactory commission. As the Royal Jennerian Society had ceased to exist for any active purpose in 1810, nothing remaining "but a Patronage, a Presidency, and an unorganised body of Subscribers and Governors," it occurred to him that it would be good policy to annex these to the revived enterprise, and in due course a union was effected, and the LONDON VACCINE INSTITUTION AND ROYAL JENNERIAN SOCIETY became the title to conjure with. An attempt was made to secure Jenner for President, but that was too bold a stroke. He thus answered the application—

"CHELTENHAM, *3rd September*, 1813.

"Although it must be evident that every institution, which has for its object the extension of Vaccine Inoculation, must have my best wishes for its success, yet, for reasons which on reflection must be obvious, you must see the impossibility of my accepting the offered appointment."

Highly impressive were the Reports of the reconstituted Institution under the patronage of the Corporation of the City of London with the City Arms on the covers. Among the presidents were the Archbishop of Canterbury, four or five Dukes (one of them Wellington), half a dozen Marquises and as many Bishops, about a score of Earls, with M.P.'s and pious and philanthropic notables many. So much was due to the tact of Andrew Johnstone, but the financial results did not correspond with the overpowering patronage. The income of the Institution never attained £1000 a year, whilst the bills for advertising and printing sometimes approached £500. In the Report for 1827 we find the operations thus summarised—

Vaccinated during 1826 by Dr. Walker	4,217
From the beginning, 1803 - - - -	65,750
By appointed Inoculators in London and environs in 1826 - - - - -	16,999
From the beginning - - - - - -	237,119
By appointed Inoculators in the country in 1826- - - - - - - - -	21,261
From the beginning - - - - - -	548,430

The income of the Institution in 1826 was £620 15s. and the expenditure £715 12s., leaving a deficit of £94 17s.

The figures are interesting, for they afford some idea of the extent of London vaccination during a quarter of a century. The operations of the Vaccine Institution lay chiefly among the poor—the vast majority in London as in every city; and if we allow that in the course of five-and-twenty years, 350,000, in a population of upwards of 1,000,000 in the flux of life and death, were operated on, we give a liberal estimate in favour of vaccination. That even so many could have much effect on the prevalence of small-pox (except for aggravation) is incredible, unless the vicarious action of vaccination be seriously asserted. Turning over Walker's reports it is amusing to observe how any abatement in London small-pox was attributed to vaccination, and any increase to its neglect—an ingenuous exemplification of the fable of the Fly and the Wheel.

The appointed inoculators of the Institution were a numerous body—250 names and addresses are given in one of the Reports. They were chiefly London tradesmen with a taste for doing what they thought "good." As vaccination came to be regarded as professional work, these "unqualified practitioners" gave cause for offence, but Walker held stoutly to his opinion, which he shared with Jenner, that vaccination might be performed by any man or woman. In Walker's words, "It is easier to perform the whole business of vaccination than it is to thread a needle—yea, it is easier."

The annexation of the remains of the Royal Jennerian Society by Walker was much disliked by Jenner and his associates; and when the revived enterprise showed signs of prosperity, their dislike developed to open enmity, and John Ring's services as bravo and satirist were called into requisition. He first tried his hand, anonymously, in a volume of doggerel, published in 1815, entitled *The Vaccine Scourge*,* in which Walker is represented as singing—

"I am a jolly beggar,
From Cockermouth I came;
I do pretend to be a Friend,
John Walker is my name;
And a-begging we will go, will go, will go,
And a-begging we will go."

* Pettigrew's *Memoirs of J. C. Lettsom, M.D.* London: 1817. Vol. iii. p. 405.

* *The Vaccine Scourge containing the New Beggar's Opera alias the Walkerian Farce, alias the London Vaccine Hoax; in answer to Dr. Walker's Jennerie Opera. A Rod for the Fool's Back.* London: 1815. Pp. 122. Price 3s.

The verses, extending over a hundred pages, are wretched stuff, vulgar and malevolent, and a few extracts from the Preface will indicate the animus of the entire performance. Ring's assumption was, first, that Walker was a rogue from whom the public required to be protected; second, that his Institution was superfluous; and third, that if greater facilities for vaccination were wanted in London, it should be left to Government to provide them—

"These hints may serve to warn the public. Dr. Walker is an artful, avaricious, and ambitious man; but let him be cautious how he acts when he tries to exercise his art, to glut his avarice, and to gratify his ambition. Let him recollect what was inscribed on the tombstone of an infamous scoundrel—

'Lie still if you're wise;
You'll be damned if you rise.'

We recommend him and his accomplices not to try to obtain money by false pretences. A Vaccine Institution has long been established by the Legislature, where, as well as at other Institutions, matter may be procured free of expense; and no one who has much zeal in the cause of Vaccination will find much difficulty in procuring it. If farther aid is necessary, let it be granted by Parliament, and not to a set of swindlers. It is not meet to take the children's bread and throw it to the dogs."

Many of the agents of the London Vaccine Institution were chemists and apothecaries, and these, according to Ring, had an interest in the propagation of small-pox—

"To exterminate small-pox by means of chemists and apothecaries, the greatest friends of small-pox, is to cast out devils by Beelzebub, the prince of the devils. You might as well expect a fox-hunter to destroy the breed of foxes, or a rat-catcher to exterminate the race of rats."

The *Vaccine Scourge* producing little effect, Ring returned to the charge in the following year, 1816, with *A Caution against Vaccine Swindlers and Imposters.** The *Caution* is a series of libels, the puerility and extravagance of which were their own nullification. A motto was taken from the *New Monthly Magazine* for the title page, as follows—

"The Jennerian discovery has shed a brilliant lustre on our era; but unfortunately, the discovery has been in a great degree rendered abortive by *bastard institutions*, created for the purpose of filling the pockets of *a set of adventurers, without education*, and *destitute of principle*. We could name several wretches who have fattened, and are still fattening, on such jobs."

Ring delivered his mind unequivocally. Walker was an imposter, and the London Vaccine Institution prospered by his frauds—

"There is a Society in this Metropolis," he wrote, "falsely calling itself the Royal Jennerian Society, which has been collecting subscriptions to a considerable amount under that assumed name; and thus collecting money under false pretences.

"An eminent physician speaking of this Society and its successful state, called it a successful villany; and villany is not the less villany because it is successful.

"It has also been organising a complete system of quackery, by granting diplomas to persons totally ignorant of the first principles of the medical profession, which will add to the present host of empirics.

"No one can now pass along the streets without being annoyed with the inscription, VACCINATION GRATIS UNDER THE SANCTION OF THE LONDON VACCINE INSTITUTION in one pane of glass, MACASSAR OIL in a second, and PATENT BLACKING in a third. In short Vaccination is now *quite a drug.*"

These are words of envy and malice, and came with odious inconsistency from the spokesman of Jenner, who had instructed and encouraged his acquaintances, male and female, to practice vaccination. We may, however, take Ring's evidence as to Walker's activity in London—

"Dr. Walker glories in his chemical, galenical, pharmaceutical, and dentrifical inoculators; and boasts that they exceed in number those of any other vaccine institution; but he glories in his shame. *Non numerentur, sed ponderentur.* They are springing up under every pestle and mortar, and barber's pole, like mushrooms in a hot-bed, from Hyde-Park Corner to Whitechapel, and from Whitechapel to Blackwall. It is the duty of every regular practitioner to expose such imposters, and to encourage such exposure. It is, in fact, the rescuing of life from fraudulent and rapacious hands.

"One of his inoculators is Mr. Campbell, who cures all sorts of incurable diseases with *Elephants' Milk.* He says he recently sent 20,000 bottles to Russia at 11s. each. He also sells the Milk in pills at 2s. 9d. a box. The poor have the Milk at half-price; and strict secresy is preserved.

"In Walker's Plan for 1814, it appears that he grants his diplomas to those who *are not*, as well as to those who *are*, of the medical profession, and that Inoculators in the country are requested and *authorised* to put up a board with the following inscription, PROTECTION FROM SMALL-POX UNDER THE SANCTION OF THE LONDON VACCINE INSTITUTION. Then is to follow the name of the farrier, cobbler, barber, barber-surgeon, apothecary, man-midwife, tooth-drawer, druggist, chemist, oil-man, cheesemonger, drysalter, or grocer, who dispenses the blessing of Vaccination gratuitously.

"The motley crew thus appointed are directed to make an Annual Return of the numbers inoculated by them in order to swell Dr. Walker's list; and such inoculators are not in general very nice in their calculations. Many of them will, in all probability, like other quacks, pretend to a hundred times more than they really perform."

Those who continued to believe that Vaccination was an easy and harmless operation, could see nothing but good management in the multiplication of Walker's agencies, nor anything but meanness in Ring's sneers at tradesmen. His assertion that the use of the title of the Royal Jennerian Society was fraudulent had no justification, yet it was his persistent reproach—

"Honesty is the best policy. I therefore, sincerely advise Dr. Walker and his Board, to assume no more the title of the Royal Jennerian Society, to which they must know they have not the least claim, lest they should be brought before the Lord Mayor as swindlers, and be prosecuted for obtaining money under false pretences. I am informed that they have already been compelled to refund a legacy of £100; and it is to be hoped they will be

* *A Caution against Vaccine Swindlers and Imposters.* By John Ring. London: 1816. Pp. 140.

compelled to refund the rest of their ill-gotten store."

Lastly, he appealed to the members of the Jennerian Society demanding—

"How long will they suffer their names to be prostituted, and the public to be deluded by a set of swindlers and imposters; by men who are neither dignified by their rank, nor distinguished by their talents; by a set of daring adventurers and despicable upstarts. It is a gross insult and indignity, to which no man of the least sense of honour, or of shame, would submit."

But they did submit, and why not? Enthusiasm for vaccination had passed away. It had been found out; it was everywhere distrusted; and those who held by it had to see it pushed on the same terms as any other quack prescription. What then was there to object to in Walker's procedure? The reason for Ring's libels lay in Jenner's jealousy. Walker was Jenner's abhorrence. He had joined in the conspiracy to oust Walker from the Jennerian Society in 1806, but the operation proved fatal to the Society whilst Walker conveyed the confidence and subscriptions of the faithful to his new Institution. What wonder then that Jenner disliked the eccentric Quaker! Even worse; Walker accurately appraised Jenner's share in "the vaccine discovery," which came, he said, from Jenner as a hint, and was developed by Pearson and Woodville in practice—a fact that was as gall and wormwood to Jenner. Moreover Walker had written a Jenneric Opera in which Jenner was represented as a country apothecary riding up to London on a cow and going round a-begging among the nobility and gentry. Wherefore says Ring—

"As to the calumny and detraction which Dr. Jenner and his friends have received at the hands of that desperate adventurer in his Jenneric Opera and elsewhere, they are content to bear it, provided he will not again use the language of flattery toward them; nor lavish his encomiums on them in that polluted channel, the Medical Journal. His resentment can do very little harm, which is more than can be said of his adulation.

'It is the slaver kills, and not the bite.'"*

Ring was an awkward champion. He sneered at Walker's diplomas certifying fitness to act as vaccinator—

"They will have the same authority," he said, "and the same virtue as a diploma from the University of St. Andrews; and in all probability will in a short time be sold at the same price"—

Forgetful that it was from St. Andrews that Jenner purchased his M.D.!

With equal recklessness, he denounced Walker as a vaccinator, saying—

"He tells the public in his Address that 'Vaccination will shed consolation into the bosom of every family;' but alas! I have known many a family that has had reason to rue the day in which they believed him, when he told them this flattering tale. . . . It is very necessary that his followers pray that the Lord have mercy on them, if they have no other director than Dr. Walker."

Concerning the consequences of Walker's operations, Ring, no doubt, testified truly. Many continue to rue the day when they listen to the flattering tale of the vaccinator. But the testimony came strangely from a Jennerite, who was ready to swear that any abatement of small-pox in London was due to the vaccinations effected in great part by "that desperate adventurer," Walker!

In order to create prejudice, Ring had much to say of Walker's religious and political principles. He was a Quaker of the Thomas Paine pattern, and like Paine had associated with the French revolutionists; but whilst dressing as a Friend, and associating with Friends, he was too unconformable a personality for their Society, and was never received into membership. Ring's imputations of rapacity and avarice were grossly absurd as applied to Walker. He cared for nothing beyond support in his work as vaccinator. He would take a £5 note, fold it, stick a pin through it, write an address on the back, and post it. He would rarely vaccinate the well-to-do. If they came to his office, he would ask, "Who is thy medical attendant?" and wrapping up some fresh matter on glasses would say, "Take this with my compliments to thy medical attendant, and he will do what is requisite quite as well as myself." When he did call at a house to vaccinate, he never asked for a fee, and his biographer, Dr. Epps,* observes that he was only known on one occasion to express a wish for remuneration. Meeting a merchant in St. Paul's Churchyard, whose household he had vaccinated at some inconvenience, he observed, "Friend, if thou has sent by thy servant a draft for my services to thy family, he has either robbed me or deceived thee." When money was brought to him, he usually called his wife to receive it, she having the undivided care of all that pertained to him apart from vaccination. Of this good woman, Annie, he was in the habit of speaking with an admiration and unreserve that constituted one of his numerous oddities. For example, when Dr. Moore in his *History of Vaccination* observed somewhat maliciously—

"John Walker, it is said, procured a medical diploma from the indulgent University of Leyden; and more excellent work than Walker's has rarely been performed by a humbler instrument"—

Walker good-humouredly replied, that Moore as a Glasgow man naturally preferred his own University to that of Leyden, but he too had cause to love Glasgow—

"'Glasgow is a bonnie town, and there are bonnie lasses in it.'

There is not any other spot on the surface of the globe where I have experienced a happiness so complete as I obtained in it in 1799. Let any bachelor who cannot divine what this assertion may mean, be

* I have been unable to find Walker's Jenneric Opera in the British Museum Library, Ring mentions it as having appeared in Dr. Reece's *Medical Observer*. It is not likely to be of much account, but I should be obliged to any reader who would kindly assist me to see a copy.

* *The Life of John Walker, M.D., Graduate of the University of Leyden; Licentiate of the Royal College of Physicians of London; and late Director of the Royal Jennerian and London Vaccine Institutions.* By John Epps, M D London: 1831. Pp. 342.

informed, that it was then and there I entered into marriage; and the covenant was ratified in the office of the Clerk of the Peace for the county of Lanarkshire."*

Walker was obstinate, but not vindictive. Dr. James Sims offered him £1000 in 1806 to prosecute his adversaries for conspiracy, but he left them to their devices, and proved his quality by outworking and superseding them. He replied to Moore's flippant version of the causes that led to the division and destruction of the Royal Jennerian Society with perfect self-control and manifest truthfulness, but at the same time with a simplicity not of this world.† Jenner's spite, Ring's abuse, and the sneers of the superfine did him little harm; and, if vaccination were beneficial, we should have nothing but praise for the good people, who recognising the sincerity of his work, disregarded trivialities of manner, and supported him loyally as a faithful servant.

Walker was nothing but a vaccinator. Day after day, in rain or sunshine, his lank figure, and self-complacent visage under a white broad-brimmed hat were to be seen making the round of the vaccine stations. When he entered a room, he first glanced at the table on which he expected to find his books. If any mothers had placed their children's bonnets or garments thereon, they were at once swept off. He then ranged the company in order against the wall like a schoolmaster, and delivered a short address on the protection he was about to confer. The children's names were taken down with a preliminary caution to speak distinctly. When women muttered or gabbled, the Doctor grew irritable, and would sometimes make a troublesome woman spell her infant's name half-a-dozen times, adding, "Now thou wilt know how to speak plainly." Having got the names, he had next to look out for virus. The few mothers who had ventured to return with their vaccinated babes for examination, would perhaps lose courage and attempt to escape, when Walker would dart to the door and arrest the fugitive, saying, "Thou foolish woman! If thou wilt not do good to others, I will bless thy little one," and would proceed to gather what he called his "Vaccine Roses." He pursued his operations calmly indifferent to the screams of the children and the complaints of the mothers, and as he disposed of each case pronounced the illusory benediction, "Thy child is safe: fear not: fare thee well."

Walker died in 1830, aged seventy-one, after a short illness, in which "he refused to take any medicine though himself a physician." In the Report of the London Vaccine Institution for 1831 we read—

"He was a man who day after day, month after month, and year after year, watched with the care of a parent the cause of which he was so experienced an advocate; who was willing to know nothing but the object of his early love, Vaccination; who for upwards of a quarter of a century never omitted one lawful day going his rounds to the numerous stations of the Institution; and who, it may be almost said, ended his life with the lancet in his hand, for he went round to the stations two days before he died."

Toward the end of his life, he used to boast that he had performed upwards of one hundred thousand vaccinations. So far as vaccination prevailed in London, it was chiefly through Walker's exertions; and he was just the character, being set going, to keep going whatever the adverse evidence or obloquy. He had his plans and his methods, and those who tried to modify them took nothing by their pains. He was a man to have his own way, and those who did not like him might leave him. Whether from incapacity or affectation, he made no attempt at politeness, and said precisely what he thought without accommodation. He was a piece of mechanism rather than of genial humanity.

ADVICE TO JERSEY.

In the *Jersey Express* of 29th March appeared the following letter to the Editor—

"Sir,—As one who looks back to good days in your beautiful island, and in the interest of health and liberty of health all over the world, I deeply regret to learn that the encroaching medical despotism is again attempting to saddle you with the dreadful burden of a Compulsory Vaccination Law.

"Have you then, for want of this Law, been afflicted with any of the evils which Doctor created panics about small-pox so sedulously conjure up before the public?

"Vaccination is at present disproved by every true statistic. It is disproved by the fact that in the late epidemic here, nearly 16,000 persons had small-pox, in spite of almost universal vaccination. This argues no preventive power. It is disproved by the fact that the death-rate of small-pox is just what it was before vaccination existed. This shows that non-vaccination is harmless as a cause of mortality. The vaccination statistics are all false; as not showing the circumstances and conditions of the few unvaccinated who have died; and respecting whom, averages are fallacious, for they have either lived in the lowest life, or else have been unvaccinated because their feeble health disallowed the process. A vaccinated Jersey will be a Jersey filled with artificial syphilis, and consumption, and many other communicable diseases; as well as a Jersey in which small-pox, communicated by variolous vaccine, will be a chronic resident, kindling into acute attacks at intervals.

"Let well alone, and do not poison every Jersey infant to make Jersey sound.

"J. J. Garth Wilkinson, M.R.C.S.E."

Dr. H. A. Martin, of Boston, U.S., says that erysipelas is the invariable concomitant of arm to arm vaccination.

* *John Walker's Reply to James Moore on University Indulgence; with some Remarks on Cardinal Wolsey's Foundation of a Metropolitan College, on Legislators and Quackery, and on National Prejudices.* London: 1818. Pp. 16.

† *John Walker's Reply to James Moore on his Mis-Statements respecting the Vaccine Establishments in the Metropolis and their Officers and Servants both Living and Dead.* London: 1818. Pp. 114.

THE NEW LYMPH CULTUS.

By William Tebb.

I called at the Establishment for Vaccination with Calf Lymph, 228 Marylebone Road, on Saturday, 2nd April. The assistant, in the absence of Dr. Renner, received me courteously, and showed me over the premises. In the stable in the rear were two calves, on one of which the vaccine pustules were in a fair state of development, and would, I was informed, be ready for use in two days. The vaccinating table to which the calf is tied is an ingenious contrivance for preventing motion in the fettered animal, not unlike the tables sometimes used by vivisectors. The assistant said the calves sometimes fretted and tried to get loose; which must tend to create more or less irritation and fever, and might account in part for the "stronger re-action in the human body" with which this lymph is credited. Before the calf is considered safe to use it is examined by a veterinary surgeon who certifies that the eruptions on the "shaved abdomen" are the genuine cow-pox. On being told that the calves were very healthy, I asked how could that be if they had cow-pox! The assistant smiled and was silent, as prudence dictated. "Such questions," as the negro said, "would spoil all the feology in the world." I inquired what advantage this system of vaccination had over arm-to-arm as a protection against small-pox. My interlocutor seemed puzzled to think that such a question should have been put, and evidently did not know what answer to give. He replied that the advantage lay in not communicating human diseases. But, I said, cows have tubercle. "Yes," he replied, "but they cannot give it in vaccination." The vaccine stock, he said, was obtained from Rotterdam, and beyond that point nothing was to be learnt. The charge for vaccination from the calf direct is £1 1s. per head, and, after the first four days, the stale lymph is administered at 5s. per head. "The guinea lymph," he said, "is the best, but the second class lymph is not bad." It is a wonder that so much can be had for the money; and in presence of so much pains to produce what is supposed to be free from danger, What shall we say of the lymph used at the Vaccine Stations supplied by Government, to which the patient and long suffering people are driven under pains and penalties, and the use of which has increased infant mortality from inoculable diseases by 20 per cent. since vaccination was made compulsory! Should we be wrong in designating the Government virus as Third Class Lymph? The *Lancet* says that considering "Vaccination is a matter of delicacy and importance, and that the selection of lymph is an act requiring care and judgment, a guinea is not an inadequate sum to be paid by well-to-do patients, half a guinea for middle class schools, and five shillings for servants." Here then we have lymph and safety graduated by fees; and to the plutocratic mind, what could be fairer?

I had almost omitted to mention that while Dr. Renner's assistant was showing me the points, tubes, and glasses, and explaining these devices, an unopened envelope on the Doctor's desk met my astonished gaze. It was addressed in large round hand-writing—

Dr. Charles Renner
Purveyor of Vaccinated Veal
228 *Marylebone Road, London, W.*

It would not have been polite to inquire as to the origin of this extraordinary letter, whether from some enterprising Paddington butcher, or some wag. If however any reader cares to try vaccinated veal, he will know where to find it.

The calves, I was informed, after the vesicles had been tapped, were sent to the butcher; thus confirming the almost incredible statements of Dr. George Wyld and Sir Thomas Watson. Sir James Paget in his *Lectures on Inflammation*, 1868, says, "The progress of the vaccine or variolous infection of the blood shows us that a permanent morbid condition of the blood is established by the action of these specific poisons on it." If such is the result of from two to six punctures on a child's arm, what must be the condition of the blood and fibre of a calf after ten times that number of insertions of cow-pox upon its abdomen? What are the inspectors of meat in Paddington about to permit such tainted flesh to be exposed for sale?

Since writing the foregoing, the following letter in reply to inquiries has been received from Dr. Renner—

To William Tebb, Esq.

4th April, 1881.

Sir,—The original source of the lymph used and propagated in my establishment is a case of original cow-pox (spontaneous) which occurred in Liège, and has been kept at Rotterdam through an uninterrupted series of calves. The lymph has never passed through the human frame.

This mode of vaccinating has been practised on the Continent, in India, and in America, for many years, and is more and more preferred to arm-to-arm vaccination. Of the proofs of protection against small-pox, I will quote only one instance, viz., that from 10,000 children vaccinated by Dr. Warlomont of Brussels, previous to the epidemics of 1871, not one case of small-pox has been known to occur. I shall be glad to supply you with all other information you may wish for, and should be happy to see you here any day at 2 o'clock.—I am, Sir, yours respectfully, Charles Renner.

Dr. Barclay in reporting to the Chelsea Vestry the prevalence of small-pox in the district observed, that in very few cases could he trace the derivation of the disease to contagion or infection.

Anti-Vaccination Literature.—Few persons have an adequate idea of the mass of literature that gathers round disputed questions. The opponents of Jenner have in preparation a catalogue of anti-vaccination literature which will comprise the titles of upwards of 400 English and foreign books, pamphlets, and memoirs, displaying their side of a controversy that has at times been exceedingly fierce. If the list includes the tracts published during Jenner's lifetime, it will chronicle some curiosities of art as well as literature, for the resources of the draughtsman were occasionally called in to show the horrors that would result, it was asserted, from the adoption of the remedy proposed by Jenner.—*Manchester Guardian.*

MISS GOLDSMID AND THE NATIONAL HEALTH SOCIETY.

MR. EDWIN CHADWICK complains that sanitary reform has degenerated to compulsory vaccination, although small-pox is among the inferior causes of premature death. It would be incorrect to say that the National Health Society is given up to the promotion of vaccination, but vaccination is one of the chief ends of its being, and the documents issued by the Society in recommendation of the practice are of a grossly untruthful and extravagant character. Some of the members excuse the evil for the sake of the good, but Miss Goldsmid is of opinion, and we think justly, that the evil is too much for the good. In a letter addressed by Miss Goldsmid to the Secretary of the Society we read—

"TOOTING, 12*th April*, 1881.

"Dear Miss Lankester,—I wish to have my name struck off the list of the General Committee, as notwithstanding the deep interest I take in all matters relating to sanitary improvement (for which your Executive Committee is doing such good work) I feel that with the opinions I hold concerning vaccination, it is not conscientious or consistent on my part to contribute to the funds of a Society which not only recommends the dangerous practice to the willing, but strenuously seeks to enforce obedience to the most tyrannical compulsory law—a law as cruel and oppressive as any that has blotted the statute-book of this great country. The Act was passed, it is said, by forty M.P.'s, the majority of whom had probably never read a line on the subject of vaccination, nor heard of its fatal consequences. Had they done so, they would never have issued so cruel an edict, whereby tender and affectionate parents are sent to prison with the vilest criminals, because they believe that to guard their beloved offspring from injury is a sacred trust confided to them by the Almighty, and who therefore refuse to have them offered up as victims for the imaginary advantage of their fellow-creatures. Other parents who are too poor or too timid to resist the barbarous law, are compelled to witness the poisoning of the blood of their children by the lancets of parish doctors, and to undergo the heart-rending ordeal of their infants perishing by dreadful diseases, or lingering for years in horrible and hopeless suffering. There is alas! too, the record of numerous tragedies in private life. Many of the facts are set forth in the books and tracts of the London Society for the Abolition of Compulsory Vaccination, a few of which I enclose that you may be assisted in forming your own judgment on this very serious question. Trusting that you soon may become a zealous anti-vaccinator, I remain, my dear Miss Lankester, yours very sincerely,

CAROLINE GOLDSMID.

THE LORD ADVOCATE FOR SCOTLAND says—It is a principle of common law that no man should be compelled to submit himself or family to a medical or surgical operation without his own consent.

MANUFACTURED STATISTICS.

IN a letter to the *Times*, dated 18th April, Mr. P. A. Taylor thus disposed of the extraordinary statistics in favour of vaccination which Mr. Galsworthy, of the Metropolitan Asylums Board, had adduced as conclusive—

"Mr. Galsworthy's letter appears to me to be an excellent illustration of the kind of evidence that is thought all-sufficient in proof of the usefulness of vaccination. It begins with a reference to the 'striking evidence' produced by Mr. Pell in *The Times* of 31st ult. Now, this evidence was purely negative. Everybody had been re-vaccinated on board the Exmouth training ship, and no one had since suffered from small-pox; *post, ergo propter!* There are many millions of people in the world who, vaccinated or not, never take small-pox, and it is a fact proved beyond all question that in various instances the crews of Her Majesty's vessels wherein every man had been re-vaccinated suffered severely from small-pox.

"And now for the example quoted by Mr. Galsworthy in proof of the protection afforded by vaccination. He repeats the old story that, out of 15,171 cases treated in the hospitals, 11,412 were vaccinated and 3,759 unvaccinated; that the mortality was 17·6 per cent., whereof 8·8 was of those vaccinated, while that of the unvaccinated was 44·4. Now, I venture to assert that it is admitted by the doctors that this division of the total mortality between those vaccinated and those unvaccinated is often impossible and generally delusive. But just observe to what a strange conclusion these doubtful statistics would lead us. In the last century, when vaccination was unknown, the best authorities place the mortality of small-pox at about 18 per cent. On what ground is it possible to imagine that now, under far more sanitary conditions and far more scientific treatment—to say nothing of having had the advantage of 80 years of vaccination—the mortality of the unvaccinated has risen to 44·4 per cent., or, as some put it (under this extraordinary mode of manufacturing statistics), to 70 or 80 per cent.? Surely the fallacy speaks for itself.

"Well, but Mr. Galsworthy admits that 1,008 of the patients who had been vaccinated died. In defence of vaccination everything is possible, but I doubt whether, in regard to any other question in the world, any one would venture to append to such an admission that 'not a single case of small-pox had come under the knowledge of the medical superintendents of any person who had been efficiently vaccinated and successfully re-vaccinated." This is, surely, merely substituting for discussion the assertion of a foregone conclusion. Efficient vaccination is a perfect protection against small-pox; therefore, whenever any person takes small-pox, he has not been efficiently vaccinated!"

MADRID.—Vaccination is now under discussion in the Academy of Medicine, and opinions are far from unanimous as to its benefits.—The Board of Health has decided *against* compulsory vaccination.—The Society for the Protection of Children has a debate on vaccination upon its programme.

LETTER FROM MR. P. A. TAYLOR, M.P.

Read at Anti-Compulsory Vaccination Meeting, Brighton, 6th April, 1881.

Brighton, April 2, 1881.

TO THE CHAIRMAN,

Dear Sir,—I am sorry that it will be impossible for me to be away from London on the day of your meeting.

I need not say how heartily I sympathise with you in this matter, and I wish to take this opportunity of pledging myself to work with you and the other opponents of Vaccination, with all the energy I have at my disposal and with what material aid I can afford.

The position is intolerable! Compulsory Vaccination is a system of tyranny and *torture;* I use the word advisedly. When did the Inquisition invent a better torture than in compelling parents who have seen their eldest born die under this stupid quackery, to have their younger ones poisoned under the penalty very often of pecuniary ruin?

I have no hesitation in asserting the confident opinion as the result of much study of the question, historically and statistically, that Vaccination is a ridiculous delusion; that there is no evidence that it has the slightest effect as a preventive of small-pox; that indeed the negative evidence is all the other way, while the positive evidence of the mischief it has done is incontrovertible.

It is worthy of note that Vaccination is for the most part *actively* defended and upheld by a small portion only of the medical profession—the medical experts and specialists; the great majority of the profession simply holding the creed—as theological students accept the 39 Articles—*without inquiry.* I can affirm that a considerable number of these are beginning to doubt Vaccination and to repudiate compulsion.

What are the weapons of the Vaccination fanatics? They are unscrupulous assertions and cooked statistics; and they fight behind the ramparts of a *muzzled* press. Hardly a paper in the country will open its columns to discussion, while almost any of them will insert the ridiculous *canards* of the Medical Experts; the men who spread syphilis through the land and call the process Vaccination, and then by another and if possible more infamous law (the C.D. Acts), pretend to stamp it out.

We have some hard work before us, but I feel sanguine of early success. So soon as we can place before the community *the truth* about Vaccination, so soon, the miserable quackery will collapse and die.

One word of warning to liberal M.P.'s throughout the country—I will not prophesy (because it is impossible to foresee what great national issues may be before the constituencies at the next General Election), but in the absence of such foresight, I believe it will go hard with those so-called Liberals who uphold a compulsory system—in itself a gross invasion of personal rights—and who will not take the trouble to inquire for themselves in regard to a legalised quackery of whose absurdity and failure nothing but inquiry is needed to convince any candid mind.—Yours truly, P. A. TAYLOR.

MEDICAL MORALITY.

THERE is an article on the Medical Profession and its Morality in the *Modern Review* for April which we strongly recommend to the attention of our readers. We who are familiar with the tactics of the profession in the matter of Vaccination vividly realise the author's warnings as to the encroachments accomplished and contemplated on the common liberty under the specious names of science and sanitation, but which in their issue signify more power, more places, and more pay for medical men. Here is what the reviewer has to say of the last project for promoting medical business:—

"We pass to the outlook for the public in future years, supposing the ambition of the medical profession to proceed at its present rate of growth for another half-century. It is obvious that Acts of Parliament, of which the Compulsory Vaccination and the Contagious Diseases Acts are the preludes, will then be multiplied till it may be hard to name the department of human existence—birth, marriage, education, employment, sickness, or death—in which a doctor's certificate, a doctor's attendance—in short, a doctor's well-paid sanction, shall not have become imperative, and the power of the profession to intrude and trammel, and interfere and enforce its exactions rendered practically boundless. As a single specimen of what is already contemplated in this way, we will only cite the correspondence which has been going on in the *Times* respecting the horrible proposal to compel parents, children, husbands, and wives to submit to be separated from their beloved ones in cases of infectious diseases, and to send them to be treated at the discretion of a medical man. The day when this atrocious scheme is legalised will be 'the beginning of the end' of all family happiness. Cowardice is always cruel, but the cruelty of this proposal to tear asunder the holiest ties in the hour when they ought to be the closest drawn, is a surprising revelation of the poltroonery to which we are advancing in our abject terror of disease. Better would it be that pestilence should rage through the land, and we should die of 'the visitation of God,' than that we should seek safety by the abandonment of our nearest and dearest in the hour of mortal trial, and leave them to the tender mercies of the men who could call on us for such a sacrifice of affection and duty.

"And while the laity are patiently listening to this vile project, the men who propose it are themselves running about with the utmost carelessness between infected and non-infected patients. Are doctors, forsooth, of different flesh and blood from other men that infection does not cling to them and they cannot convey it, since no one thinks of *them* as the ever active disseminators of zymotic diseases all over the country? *They* have never been required (as they ought to be) to abandon one or other half of their practice, and confine themselves either to infectious or non-infectious cases."

IN SEARCH OF SAFETY HE WAS SLAIN.—James W. Whitaker, Chief Engineer of the United States Navy, and for the past six months attached to the United States training ship Minnesota, at the Brooklyn Navy Yard, died at 163 De Kalb Avenue, Brooklyn. He was vaccinated a few weeks ago, and this resulted in an attack of erysipelas, of which he died. He was born in New Jersey in 1836. He had been twenty-three years in the naval service.—*New York Tribune.*

PERSECUTION OF MR. JOSEPH ABEL.

At the Faringdon Petty Sessions on 12th April, Mr. Joseph Abel, watchmaker, of Faringdon was summoned for disobedience of an order made on 18th September to have his child, Joseph Henry, vaccinated within six months.

Mr. Abel pleaded guilty to not having his child vaccinated; but said he was *not guilty* of poisoning his blood by the inhuman operation called vaccination; and proceeded to give his reasons for resistance to the order. In the first place, vaccination had failed to accomplish what its advocates asserted, namely, to prevent or mitigate small-pox. As a proof of its impotence, the London small-pox hospitals were full of patients, notwithstanding that from 95 to 98 per cent. of the population were vaccinated. Secondly; when some time since there were 10 cases of small-pox in Faringdon with 5 deaths, all the sufferers had been vaccinated or re-vaccinated. How were they protected? Thirdly; as regards the evils of vaccination, he had often adduced instances in Court, and he was sorry to say there was a constant succession of fresh disasters. Among the most recent brought under his notice was a child healthy until vaccinated, but now wasting away, with limbs at two years of age no larger than those of an infant of six months. Another was a beautiful child previous to the beastly operation, but now its head and face were frightful to look at with a scaly eruption. The mother was bringing the child to Faringdon that day to see whether the doctor could do anything for it. Fourthly; having already been summoned 84 times, and paid over £42, he would ask the Bench to dismiss the case, or to mitigate the fine, without costs, as at Bedford and other towns where 6d. and 1s. are the nominal penalties. Fifthly; a friend last Sunday, knowing of the prosecution, gave him these words, "Nothing shall by any means hurt you." He was therefore content to leave the matter in the hands of his best Friend, knowing that in the end all would work together for good.

The Bench retired to consider their decision and on returning said the fine would be 10s. and 10s. 6d. costs. Mr. Abel has now paid £43 6s. 9d. in fines and costs.

The magistrates present were Messrs. D. Bennett, T. L. Goodlake, W. Dundas, and W. J. Butler. Mr. Goodlake, being a Guardian, retired from the bench during the hearing of the case; but Mr. Bennett, another Guardian, remained; and, if we are rightly advised, his presence vitiates the whole proceedings. Indeed the summons was signed by Bennett, who thus acted as prosecutor and judge!

Neither Small-Pox nor Vaccination of any avail.—Dr. Lewis, Medical Officer in Chief, General Post-office, wrote to the *Lancet*, October 9th, 1871, "I have always maintained that vaccination is quite as good a preventive of small-pox as a previous attack of the disease itself. To-day a letter carrier presented himself to me, who has two children—nine and five years old. They were both, he assures me, successfully vaccinated in infancy; both subsequently had small-pox, and are again attacked with it."

SLAVERY IN THE UNITED STATES, AND TYRANNY IN ENGLAND:

A Parallel.

One parallel to this blind presumption which my personal experience enables me to vouch for occurs to me. It is now twenty-three years since the whole of the United States of America, both North and South, were committed by the laws of the country, the decisions of the public courts, and to a large extent by public opinion, to the defence and perpetuity of chattel slavery. The well-to-do, the commercial, the manufacturing, and particularly the professional classes, with all the popular churches, resisted the Anti-Slavery party—a party inferior in point of numbers to the opponents of Compulsory Vaccination in England to-day. Throughout the vast area of the Southern States slaves were bought and sold like bales of cotton or casks of tobacco; families were separated; Virginia alone raised 20,000 slaves every year for the Georgia and Louisiana markets. The press, the Religious Tract Society, the Bible Society, the Missionary Societies from Maine to Texas, were as silent and acquiescent to this diabolical traffic as are the same organisations in this country to the tyranny which makes pure blood and good health a criminal offence. At this period in the city of Boston, United States, I heard Theodore Parker make use of these remarkable words: "There are 80,000 clergymen in these United States, and I can count upon my ten fingers all who are opposed to slavery." Yet Slavery, with all its powerful support, entrenched in apparent security as strong as Quebec or Gibraltar, but being founded on falsehood and inhumanity, fell before an enlightened public opinion. So also will the evil system against which our assaults are made fall in like manner. Truth spreads slowly, but it does spread, and future generations will be amazed to learn how, in so enlightened an age, a cruel, filthy, and mischievous superstition could have so long survived. To use the words of the greatest reformer of this generation — William Lloyd Garrison—"Nobody ought to despair whose cause is just. Nobody is justified in despairing if he has a righteous cause to uphold. It may not be given him to see it triumph, but that is only a question of time; it is an immaterial thing; but the right itself, why, there is no power on earth can ever stay it! None can ever defeat it in the end; God himself is pledged to its final victory."—*From Mr. W. Tebb's Address at the Town Hall, Brighton, 6th April, 1881.*

Dr. Corfield congratulated St. George's Vestry that it was unnecessary to provide special accommodation for cases of small-pox within their bounds. "The disease," he said, "only attacked the ignorant who did not avail themselves of the protection afforded by re-vaccination; and happily they no longer heard of the havoc made in great houses by the disease that went forth like a destroying angel subduing all before him:"—Dr. Corfield's ascription of the comparative absence of small-pox in St. George's to re-vaccination is on a par with the angel that played havoc with great houses. Such is the license of medical fancy!

QUESTIONS IN THE HOUSE OF COMMONS.

On 28th March Mr. P. A. Taylor asked the President of the Local Government Board whether it is a fact that there is no well-ascertained case of spontaneous cow-pox on record; whether it is a fact that the common practice for many years has been to inoculate the calf with the virus of human small-pox, thus causing, in the words of Sir Thomas Watson, "a vast amount of mitigated small-pox"; whether it is a fact that within the last few years the mortality from small-pox at the Hague and other cities in Holland and Belgium (whence he proposes to obtain fresh lymph) has been enormously large; and whether he will bring in a Bill to abolish compulsory vaccination.

Mr. Dodson said he did not know what his hon. friend would consider a "well-ascertained case of spontaneous cow-pox," but cases of outbreaks of the disease amongst cows were specifically mentioned in the treatises on the subject, as well as in the evidence before the Select Committee in 1871.* He was informed that it was not a fact that the common practice had been for many years to inoculate calves with the virus of human small-pox.† He had no statistics as to the mortality from small-pox in Belgium, but in Holland the mortality in the epidemic of 1870-72 was very large indeed. There was nothing to show what proportion of the cases were vaccinated, and it must be borne in mind that neither in Belgium nor in Holland was vaccination compulsory. He had no intention to bring in a Bill to abolish compulsory vaccination.

Parliamentary Popery.—One who carries disease with him is ostensibly dangerous. This, and this only, justifies legislation against him. But when a man or child is ostensibly healthy, no case is made out for legislation at all. To enact that a healthy person shall have a disease lest hereafter he get a worse disease, is a form of despotism hard to parallel; and what is peculiarly disgraceful, it is directed against innocent infants alone, because they are helpless—it does not dare to attack us adults. Let parliament enact that every M.P. shall be at once vaccinated, and that it shall be done from arm to arm every four or five years, as the doctors may determine,—if Parliament will enact such orders concerning children. The law now says to a parent—"We are alarmed to see that your child has no disease. Cow-Pox (for the public good) it must have, with the chance of other hideous diseases: submit, or else make yourself a criminal." Such legislation implies that Parliament is a Medical Pope, and justifies no end of monstrous violations of sacred personal rights.—F. W. Newman.

* Perhaps so; but Professor Simonds, of the Royal Veterinary College, says that in his long experience he has never seen a case of cow-pox, or of bull-pox, and that he questions the existence of the disease. Moreover, the editors of the *Veterinarian* have advertised repeatedly for a case of cow-pox in vain.

† In this reply an evasion is effected under the words a "common practice." The practice has been common enough, but how common? Every well-informed vaccinator knows that an immense quantity of the lymph in circulation has been derived from the inoculation of cows with small-pox. Mr. Dodson of course speaks "as informed" by the vaccine officials of the Local Government Board.

AN INQUIRY BY DR. STEVENS.

The child of Mr. George Daniell of Lake, Sandown, Isle of Wight, was vaccinated in two places on 8th January by Mr. Meeres, the public vaccinator. It was a healthy child; as Mr. Daniell writes, "the strongest and finest baby we have had born to us, and we have four children living." After the vaccination, the child's health began to fall off. It started and cried at nights, and had a difficulty in breathing. Four weeks after vaccination, the arm had not healed. Mr. Meeres was sent for, and told the mother to take great care of the child. She asked if there was any danger, and he, Dogberry like, replied, "Not if it gets no worse." Dr. Barker was called in on 17th February. He found lymphatic swellings, and said the child's blood had been poisoned. No improvement took place. The child was affected all down the side on which it had been vaccinated. The leg seemed completely paralysed. The foot mortified. After four hours of convulsions the child died. Dr. Barker certified the cause of death in this fashion—"Pyœmia (? from vaccination)."

The report of the case getting abroad and causing considerable excitement, the Local Government Board sent down Dr. Stevens to investigate and report. The inquiry was held on 31st March in presence of the Guardians. The whole drift of the medical evidence was directed to get rid of Dr. Barker's certificate, and to conjure up another cause for the blood-poisoning than the true cause, vaccination. Thus Meeres, the vaccinator, testified—

He heard the child was ill and saw it on 29th January. There were indications of imperfect breathing in the right lung. The child *seemed* to have had an attack of pneumonia, which had left a certain amount of weakness behind. He had never seen a case of pyœmia in a child three or four months old.

Mr. Blake.—Assuming the child died from pyœmia——

Mr. Meeres.—I don't think the child did die from pyœmia.

Mr. Blake.—Assuming it did, and that vaccination did not cause it, what would you think was the cause?

Dr. Stevens.—We cannot go into such speculative matters.

Dr. Barker was then called and was freely permitted to speculate concerning the cause of the pyœmia. He thought it *might* have originated thus. *If* the child had had pneumonia, it *might* have broken down the lung, pus *might* have been formed, and that *might* have got into the blood, and caused death. He was of opinion that the child *had* died of pyœmia. He was aware that Mr. Meeres was of a different opinion, but he had nothing to do with that.

Asked why he prefixed a note of interrogation to "from vaccination" in his certificate, he replied—

There was a great deal of agitation in the district about vaccination, and I put in the query to show that I was doubtful as to vaccination being the cause of death. The mark was put there solely for the information of the Registrar, and it was a question if Daniell *had not rendered himself liable to prosecution for having used the certificate for other purposes than registration.*

Mr. Blake.—You do not mean to say that a person has not a right to know what his child dies from? Besides he can at any time obtain a copy of the certificate as entered by the Registrar.

Then ensued a passage of fencing—

Mr. Blake.—When you wrote the certificate of

20th February giving pyœmia as the cause of death, did you think at that time it was the effect of vaccination?

Dr. BARKER.—Certainly not.

Mr. BLAKE.—Then why did you write "? from vaccination"?

Dr. BARKER.—Because blood-poisoning had been mentioned, and I put it in for the information of the Registrar.

Mr. BLAKE.—But the Registrar would not have known anything about it if you had not yourself made the suggestion in the certificate. Would not the common-sense construction of that certificate be that at the time you gave it you had a doubt in your mind as to whether the pyœmia was not due to vaccination?

Dr. BARKER.—No.

Mr. BLAKE.—It is needless for me to ask you any more questions.

Dr. BARKER.—I was certain in my own mind that the friends would say the child died from vaccination, and therefore I put a negative query in the certificate showing I was doubtful about it.

Mr. BLAKE —That is precisely what I said. You were doubtful.

Mr. BARKER.—I was not doubtful.

Mr. BLAKE.—You said just now you were.

Dr. BARKER.—Meaning I could not swear upon the point. There are various kinds of doubt, and I doubt now if the child was killed through vaccination.

Mr. MEERES.—Had you any suspicion at the time you were attending the child that it was ill from the effects of vaccination?

Dr. BARKER.—Not the slightest.

Mr. MEERES.—There is a rigid etiquette in the profession, and if Dr. Barker had thought the child was suffering from vaccination, he would have inquired who vaccinated it, and would then have communicated with me. As a gentleman, he was bound to do so.

Dr. STEVENS.—The case is a very understandable one. It is clear to me that the history of the case given by Dr. Barker is correct. [He gave no history: only some surmises.] Pneumonia, for which Mr. Meeres had treated the child, had damaged a large part of the right lung, which crippled the child's circulation, and it died exhibiting all the symptoms one would expect to find from such a crippling. *It is altogether out of the question that vaccination had caused it.* He had seen the child from whom the deceased child was vaccinated, and it was as healthy a child as could be seen anywhere. Five other children had been vaccinated from the same lymph, and they had all taken remarkably well, making it perfectly conclusive that there was no fault in the lymph. I think this is a conclusion of the case which must be satisfactory to us all.

Such was the inquiry and such the result! The conclusion of Dr. Stevens is too grotesque for serious discussion. The pneumonia with the damage to the right lung was evolved from Dr. Barker's imagination, and was snatched at by Dr. Stevens to save what is called "the credit of vaccination." The death of the child was due to blood-poisoning from its vaccination, and the series of symptoms are what we are familiar with in similar cases.

COMPULSORY VACCINATION. — In answer to a correspondent, the Editor of the *Herald of Health* says:—"If parents wish to poison their children in this way, there is no law to hinder them. What we have to do first, is not to compel them to do so by Act of Parliament."

JOHN SCHNELL'S NOSE.—For the benefit of science, Mr. John Schnell, the apothecary of the Board of Health, vaccinated himself on the nose to determine the efficacy of bovine virus on that organ. The vaccine, Mr. Schnell found, worked like a charm, and during the past few days his face has swollen to twice its natural size, while his nose became so immensely enlarged that it covers half of his face. His friends now fail to recognise him, but the physicians who visit the Health Board office find in him a subject for scientific observation.—*New York Tribune.*

CORK.—We observe with pleasure that Mr. G. Cotter Beale's refusal to have his child vaccinated has led to much useful discussion in the *Cork Daily Herald;* and that Mr. Beale ably maintains his position against the adversaries. These newspaper discussions serve our cause most effectually, and reveal to medical men themselves facts and statistics of which they were ignorant. Vaccination with most vaccinators has been received as uncontested matter of faith, as is evident from the amazement and indignation they display when attacked, and the array of ancient fallacies they innocently bring forth for defence.

THE GIBBS.—Chief among the early exponents of the Vaccination Failacy have been the Gibbs family. Mr. R. B. Gibbs in a letter to Mr. Tebb observes—"I recognise gratefully your reference to my *cousin* John, my *brother* Richard and myself. For them, as for myself, I may say that our desire would be and is not to claim any peculiar merit, only to be recognised as men who tried to do their duty in rousing their fellow-men to a sense of the evil which it pleased a Higher Power to allow them to see more clearly and more quickly than others. The time will doubtless come when the evil will be generally recognised; but opinion (public opinion) changes slowly; therefore patience is specially needed by the reformer."

MERCILESS AND FOOLISH FEAR.—"Fear," says Cæsar, turns a deaf ear to every feeling of pity." The ignorant and superstitious are now officially taught (as in dark ages) especially to *fear* the bugbear *Contagion.* Hence the sick may be turned out to die on the cold stones. The Statesman *fears* the Faculty, and bends to superstition created by his subordinates. The Member of Parliament *fears* to injure his Party, and holds his peace. The medical profession *fears* for its *prestige* and its practice; so the majority shut their eyes, and the more intelligent groan in silence, whilst the bravely honest suffer opprobrium. The official *fears* for his salary and posiaion; and looking steadily through a false medium, continues zealously to worship the idol which Moloch, the king, has set up.—F. W. NEWMAN.

THE NEW LYMPHERY.—The following advertisement has been inserted repeatedly in the London newspapers—

H. M. OFFICE OF WORKS, &c., 12 WHITEHALL-PLACE, S.W. 1ST APRIL, 1881.—The COMMISSIONERS of H.M. WORKS and PUBLIC BUILDINGS are prepared to receive OFFERS of PREMISES within a radius of four miles from Charing Cross, suitable for an ANIMAL VACCINE STATION. The requirements are as follows:—Stabling, &c., for about twelve calves; an open yard, with the usual accessories; and a house adjoining, with suitable rooms for operating purposes, and for the residence of a caretaker. Full particulars and a plan showing the required accommodation may be seen on application to MR. WILSON, at this Office, between the hours of 11 and 1.

Offers should be addressed to The Secretary, H.M. Office of Works, &c., 12 Whitehall-place, S.W., on or before the 21st inst.

A. B. MITFORD, Secretary.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 27.] JUNE, 1881. [Price 1d.

NOTES OF THE MONTH.

Dr. Cameron, M.P., has an article in the May *Fortnightly Review* entitled "Has our Vaccination degenerated?" It is his object to prove that it has degenerated; that the virus originally used has been gradually losing its efficacy, of which the demand for many "marks," and for repeated vaccination is evidence. Dr. Cameron is curiously ignorant of the history of vaccination. He apparently knows nothing of the vaccination failures that maddened and confounded Jenner, which disenchanted his followers, and left believers with little save the convenient formula that "if vaccination did not prevent small-pox it made it milder." Nor does Dr. Cameron specify the virus which has deteriorated. Is it cow-pox, or is it cow-pox from horse-grease, or is it horse-pox? These, if we may believe Jenner, were used indifferently; but the pox Jenner did *not* believe in was the spontaneous cow-pox in which Dr. Cameron is pleased to place his trust. Nothing more clearly exhibits the unscientific spirit in which Dr. Cameron pursues his inquiry than the neglect to define the virus that has degenerated. He believes in the early miracles of vaccination; but if any one were to assert that those miracles were due to the use of horse-pox, it is not Dr. Cameron who could prove the contrary. He should knot his thread before he begins to sew.

Dr. W. B. Carpenter has been making an exhibition of himself. Nettled with the scarcasm of the *Modern Review* on medical morality, and remembering that he was educated for a medical man, he felt impelled to do something for the credit of the craft, and incontinently burst into a defence of vaccination in the *Spectator*. As concerns the vaccination controversy, he is an absolute novice, repeating the various standard fallacies as if they were unquestioned and unquestionable. He goes through the usual performance of exaggerating the London small-pox of last century, multiplying it by the population of the United Kingdom, and then calling us to look on that picture and compare it with our happy lot since the sun of Jenner shone upon us. Once more he recites the outrageous statement that whilst the vaccinated die of small-pox at the rate of 8.8 per cent., the unvaccinated perish under the doctors' hands at the rate of 44.4 per cent—small-pox having become thrice as murderous as it was last century when all were unvaccinated! Then the re-vaccinated nurses who never catch small-pox are marched across the stage for the thousandth time, with the addition in italics, "that whilst *not one* of the re-vaccinated was attacked, half-a-dozen, who by some mischance were not vaccinated, *all* took the disease." Thus is falsehood confirmed and enlarged. We see a lying legend growing under our eyes, developed, rounded and completed after the fashion of the myth.

The inaccurate and credulous habit of Dr. Carpenter's mind comes into strong relief in a statement about Iceland. There was, he says, toward the middle of last century "a small-pox epidemic which carried off 40,000 persons—*one-fourth of the total population*, in six months; so that (according to the ordinary proportion of deaths to cases) the whole population must have been attacked, save such as still survived from the date of the last epidemic." Here we have the mortality of the unvaccinated Icelanders given as 25 per cent.—*not* 44.4 per cent. the current rate cited by Dr. Carpenter on the same page! Then we have the population magnified to 160,000! Now Iceland, as every school-boy is supposed to know, is an island about the size of Ireland, with the population of the city of Limerick. 40,000 deaths would, therefore, have gone far to exterminate the Icelanders. The statement, whether invented or palmed upon Dr. Carpenter, is far from creditable to him. Iceland, it is true, has suffered severely from epidemics of small-pox at wide intervals of

time; considering the habits and circumstances of the people is there much cause for surprise that they should thus suffer? We are not concerned to maintain that small-pox may not be a very deadly affliction; we merely say that vaccination cannot avert it.

DR. CARPENTER also refers to the diminished number of pock-marked faces that are seen now-a-days; but he must know that whether patients are marked or not marked depends largely on methods of treatment. Nevertheless when small-pox was commoner in London, there were probably more marked faces; but there is no reason to believe that what might be true of London was true of the country. In a subsequent article will be found an account of small-pox in Norwich during the first twenty years of the present century; and we would ask how many pock-marked faces were likely to be seen in the streets of Norwich, say, in 1815? A discussion as to impressions is endless: where some confidently assert they have seen many, others will as confidently assert they have seen few. If we inquire *when* pock-marked complexions began to disappear, the answers will confound us. Dr. Epps, Director of the Royal Jennerian Institution writing in 1831, says—

"Man, when danger is removed from his dwelling, is apt to forget the means of deliverance. Seldom are persons seen blind from small-pox. Seldom is the pitted or disfigured face now beheld; and equally seldom do mankind now inquire the cause. It is Vaccination."

Such was the report of an acute observer fifty years ago. Pock-marked faces had even then disappeared, when as yet not ten per cent. of Londoners were vaccinated!

THE *Spectator* is the Pharisee of genteel Liberalism, and those who judge it by its words would as soon think of Aristides picking pockets as its editors intercepting truth and shielding a contributor of misinformation. Several who read Dr. Carpenter's letter and were astounded over his Icelandic statistics, his repetition of the nurse fable, his adoption of the extravagant death-rate for the unvaccinated, and his ascription of the London small-pox of last century to the whole country, naturally wished to say something in refutation of these absurdities; but not a word would the Editors suffer. A physician was informed that the *Spectator* was not a medical journal, and they were not going to have a medical discussion. Mr. Tebb received a note so characteristic in its kind that we reproduce it—

"The Editors of the *Spectator* beg to return Mr. Tebb's letter. They have not the space for a discussion on a subject on which opinion is made up."

If made up, why print such a superfluity as Dr. Carpenter's letter? Against whom was he contending? The time is not distant when such an incident will be thought incredible, and we record it in proof of the obstruction with which true science has to contend in the struggle for recognition.

ELATED by his uncontested appearance in the *Spectator*, Dr. Carpenter repeated his performance with variations in the *Times* of 12th May—a marvellous medley of ignorance and assumption. What is to be said of a writer who asserts that "the great bulk of the English people" were protected from small-pox last century by inoculation; and who then avers of the same people during the same century "that it was quite exceptional for any one to reach middle age without having been the subject of small-pox!" The statements nullify each other, and both are wildly untrue. Mr. Ceely, he says, inoculated cows with small-pox, and thereby proved the truth of "Jenner's view that cow-pox was really small-pox modified by passing through the cow." Jenner taught that cow-pox originated in horse-grease; nor is there any evidence that the view imputed to him ever entered his head. Small-pox lingers among us, says Dr. Carpenter, owing to the persistence of an unvaccinated residuum. On the contrary, say we, outbreaks of small-pox almost invariably originate among the vaccinated. He further asserts, that were re-vaccination compulsory at the age of 18, small-pox might be completely exterminated. In reply we ask, Why is it not exterminated in the re-vaccinated army and navy? Out of 80,000 deaths from small-pox between 1847 and '77, no less than 48,000 were of children under five years of age, at the very time when vaccination was recent and potent in their blood. Why did they die? The history of vaccination is a record of falsified prophecies: as one has exploded, another has been substituted; and in spite of recurrent disaster, the prophesying goes on with as much assurance as ever. Dr. Carpenter multiplies stories of the ravages of small-pox anterior to vaccination. We reply the ravages external to London are grossly exaggerated, whilst any proved abatement is amply accounted for by sanitary reforms,

by change of diet, and by better diet. Dr. Carpenter assumes there is in us "a congenital liability to small-pox" which vaccination checks. Is there also a congenital liability to ague and typhus? The inhabitants of the Fens used to suffer almost universally from ague; but as the marshes have been drained, ague has disappeared simultaneously, shall we say? with the congenital liability. Londoners when they lived closely packed over acres of cesspools with their dead rotting by thousands in adjacent churchyards were tormented with small-pox and typhus. Typhus is almost extinct. Why? Small-pox remains, but much reduced. Why? Dr. Carpenter attributes the change to vaccination; we maintain that it is due to the same order of causes which has relieved Londoners from typhus.

Mr. Edwin Chadwick at the Sanitary Institute enforced Dr. Richardson's condemnation of monster hospitals with the weight of his great experience. He said that medical men are apt to overlook psychological influences and to deal with their fellow-creatures as if they were bodies without souls. He had sent one of his own servants to a well-known consumption hospital, but at the end of a few days the poor fellow entreated to be allowed to leave, for his suffering and dying comrades dragged him down to their own level. Patients should as far as possible be treated at home where the conditions of recovery are (all things considered) most favourable. There were stages in fevers when to be lifted out of bed, conveyed to an hospital, and deposited among other miserable sufferers, was to invite a fatal issue. In the course of the discussion, Mr. Bernard of the Stockwell Small-Pox Hospital supported Dr. Collie's opinion, that the danger from large hospitals was illusory. Patients were sent to hospitals too late. They often arrived dying, and even dead. A large body of workmen were engaged in close proximity to the Stockwell wards, and for their security he went out and offered to vaccinate them. Only half-a-dozen accepted his services, but not a man among them contracted small-pox; and if they were exempt, how could it be supposed that people more remote were infected? As we listened it seemed afresh amazing that Londoners should be terrified daily as to the peril in which they stand from the present epidemic, when men like Dr. Collie and Mr. Bernard assure them, in terms which lack nothing of emphatic sincerity, that they might live next door to a small-pox hospital with complete impunity.

Anything appears to be credible, if in favour of vaccination. To the re-vaccinated nurses, who never catch small-pox, are now to be added the London postmen, and post-office clerks. Dr. Waller A. Lewis, principal medical officer of the Post-Office, is made responsible for the statement that among 10,504 persons in the London service, there were only ten cases of small-pox from 1870 to 1879. In the Telegraph Department, numbering 1,458 persons, among whom, it is said, re-vaccination had not been enforced with equal strictness, twelve cases of small-pox had occurred, one proving fatal. In presence of these facts, we are asked, "What have you to say?" First, we answer, we should like to see Dr. Lewis's report, which, for some reason, is withheld from circulation. But, taking the statement as communicated to the press, it in nowise affects our position, whilst it affords yet another proof of the unscrupulous and unscientific spirit in which these defences of vaccination are conjured up. Dr. Lewis knows perfectly well that small-pox is predominantly a disease of the young, and that his postmen and post-office clerks are, by their years, excluded from the force of any small-pox epidemic; whilst it would be nothing short of fraudulent to represent them as equivalent to the general population of young and old in any urban or rural district. Moreover, by their way of life, whether out of doors or within doors, they are workmen under specially healthy conditions, and little likely to be affected with small-pox. In a report on the Small-Pox Epidemic of 1877 in Birkenhead, Mr. Francis Vacher, the Medical Officer of Health for that town, draws attention to two points, first, "the especial prevalence of the disease among children and young persons," and, second, that of 603 persons affected in Birkenhead, "an overwhelming majority were derived from the families of labourers and artizans" — there being, indeed, only six exceptions. Mr. Vacher is, after the habit of his order, an enthusiastic advocate of vaccination and re-vaccination; but his testimony proves that immunity from small-pox is an affair of age, habit, and habitation, irrespective of vaccination. Wherever we investigate, we find this invariable result—the vast majority of cases of small-pox among the younger members of those classes in whose conditions of existence not only small-pox is bred, but other forms of zymotic disease. Had there not been a single case of small-pox among the officers of the London Post-Office we should not have been surprised; as it is, according to Dr. Lewis, they have had their full share of the metropolitan affliction.

Public meetings in London are nearly always affairs of uncertainty and anxiety. With whatever attractions, an audience is not to be reckoned upon. The London Society for the Abolition of Compulsory Vaccination had, however, no reason to be dissatisfied with their first Annual Meeting on 18th May, even though the weather happened to be unpropitious. The speaking was throughout excellent—forcible, well-informed, temperate; at marked variance with the folly and fanaticism wherewith it is customary to libel opposition to vaccination. But it is unnecessary to describe what, with Mr. Henry Pitman's assistance, we have reproduced in full in supplementary pages. Read and judge.

THE STORY OF A GREAT DELUSION.

CHAPTER XXVII.

NORWICH, EDINBURGH, GLASGOW.

WE have had to caution our readers repeatedly against the common assumption that the London small-pox of last century was the measure of English small-pox. It was not so. Small-pox was endemic in London, whereas it occurred as an occasional epidemic in other English towns, and was almost unknown in many rural districts. Moreover, the disease was not allowed to die out, but was diligently cultivated and diffused by inoculation. As vaccination was introduced, the practice of inoculation correspondently ceased, and with its cessation there was an abatement of small-pox, which abatement was unwarrantly ascribed to vaccination. How much of the small-pox of last century was due to inoculation, it is impossible to determine; nor would it be safe to take the assertions of the early advocates of vaccination as evidence on the point. We apprehend that if small-pox were something desirable which everyone was intent on catching, it would be discovered that it could not be universally caught, and that its propagation had definite limits; and it is not improbable that among Londoners the limit of propagation was closely approached, so that nearly all who were susceptible contracted the disease. What, however, we wish to enforce is, that the decline in the prevalence of small-pox, which in some places coincided with the introduction of vaccination, was really due to the discontinuance of small-pox culture—that the suppression of inoculation would have given the same result without vaccination.

The vital statistics of last century were largely the products of inference and conjecture, and were more or less affected by the bias of the collector; but if even we had the correct mortalities of small-pox in the chief centres of population, such as York, Hull, Norwich, Chester, Coventry, Bath, Bristol, Exeter, and Plymouth, we should still be puzzled to separate what was due to insanitary conditions of life from what was due to the artificial induction of the disease by inoculation. It has been observed that the 18th Century did not terminate in England until 1830; and accepting that liberal allowance, we may resort to an interesting record of a virulent epidemic at Norwich in 1819 for some light on the character and incidence of urban small-pox prior to the rise of such great communities as Liverpool, Manchester, Leeds, Sheffield, and Birmingham. The account of the epidemic was written by John Cross, a surgeon practising in Norwich.*

In those days Norwich contained a population of about 40,000. The city was accounted salubrious, and small-pox was little known. Cross writes that "in 1805, *after being for a time almost extinct*, small-pox prevailed so much in Norwich as to excite some attention." The attention excited led to an attempt to introduce vaccination. A meeting was held in the Guildhall, 16th July, 1805, "to concert measures for the extermination of the disease," and resolutions were passed to discourage inoculation with small-pox, and "to substitute immediate and universal vaccination of the inhabitants of the city and its hamlets." This outbreak of small-pox and vaccination appears to have subsided together, for Cross continues—

"After being absent for a year or two, small-pox was again introduced to Norwich by an individual from London, and spread so extensively among those whose obstinacy, or whose prejudices made them resist vaccination, that 203 deaths from small-pox were recorded in the Bills of Mortality between 1807 and the end of 1809. Small-pox again appeared in 1813, in which year 65 deaths took place; the mortality being confined to so small a number by the early and extensive adoption of vaccination before the danger was actually at hand. From the year 1813, it may be said, there was no small-pox in Norwich until the rise of the epidemic which I propose to describe. Not a death from the disease was noticed for four years. Indeed, the only case that came to my knowledge, during the time specified, was the servant of a celebrated public character, who, being seized with small-pox, was detained in Norwich, but from whom, so far as I could learn, the contagion did not extend."

We shall presently refer to the number of vaccinations effected in Norwich, and to their influence in arresting small-pox. What we would now draw attention to is, the comparative rarity of small-pox in Norwich in those times. Years two, three and four elapsed without a single death from the disease! How does such a fact accord with the common-place of vaccinators, that before the advent of Jenner the people of England were decimated with small-pox, and that 40,000 perished annually? When we press for evidence for these extraordinary statements, we either get no answer, or we discover that the mortality of a bad year of London small-pox has been multiplied by the population of the United Kingdom, thus yielding the astounding total of 40,000 victims. Our reply is, that there is no warrant whatever for this conversion of London mortality into national mortality; that London was unique in its circumstances; and that, setting the immense rural majority aside, even in the largest cities, such as Norwich, years passed away without any deaths from small-pox.

Vaccination had the prestige of fashion, and the leading citizens of Norwich were philanthropic and scientific after the newest lights, and whatever was accounted "proper," they were intent to effect. To have the vulgar vaccinated, was however, no easy matter. Many declined because they had no fear of small-pox. What indeed had they to be alarmed about? Moreover, as experience advanced, the futility and danger of the new inoculation became more and more apparent. It began to be known that it not only failed to avert small-pox, but that it frequently induced serious illness, per-

* *A History of the Variolous Epidemic which occurred in Norwich in the year* 1819, *and destroyed* 530 *Individuals; with an Estimate of the Protection afforded by Vaccination, and a Review of Past and Present Opinions upon Chicken-Pox and Modified Small-Pox.* By John Cross, Member of the Royal College of Surgeons in London. London: 1820. Pp. 296.

manent injury, and sometimes death. It is to be remembered that the symptoms of vaccination were watched at the outset of the practice with keen attention, and that the general verdict, especially of mothers, was distinctly adverse to its harmlessness. That such was the common judgment was manifest from the rapid decline of the early furore in its favour, and its contemptuous neglect by the mass of the people until revived and enforced by legislation. As the citizens of Norwich would not be vaccinated, it was determined to try the effect of bribery, and surgeon Rigby in 1812 induced the court of guardians to offer a reward of 2s. 6d. to every person "who should bring a certificate from a surgeon of having gone satisfactorily through the cow-pox." The results of this bribery are set forth as follows by Cross—

511	received the award	in	1813
47	,,	,,	1814
11	,,	,,	1815
348	,,	,,	1816
49	,,	,,	1817
64	,,	,,	1818
1402	,,	,,	1819

The larger numbers in 1813, '16, and '19 were due to panic and pressure; but the figures may be taken for a graphic representation of the distrust with which vaccination was regarded after ample experience. Of course many were vaccinated who did not claim the parish half-crown; and at the end of 1819 it was calculated that 10,000 in Norwich had submitted to the Jennerian rite from the date of its introduction at the beginning of the century. Thus considerably less than a fourth of the inhabitants were what is called "protected."

We now come to the narrative of that great outbreak of small-pox, which, says Cross, destroyed more lives in less time in Norwich than any epidemic since the Plague. It is almost superfluous to state that the disease did not originate in Norwich: it never appears to originate anywhere: it was imported. A girl travelling with her parents from York caught the infection in transit at a market-town, and as soon as she arrived in Norwich was laid up with the disease.

"This happened," says Cross, "in the latter end of June, 1818; and the earliest cases of small-pox that were seen by any medical man were traced to this origin. I have been able to ascertain the different families by which the disease was kept up during the remainder of that year, but it extended to very few, and proved fatal in only two instances. A druggist inoculated three children in January, 1819, thus helping in a small degree to spread the contagion, which the season of the year was calculated to keep within narrow bounds. Still no alarm was excited; a single medical man only was acquainted with the disease; and the cases of small-pox were so few until the latter end of February as to be scarcely noticed. At this time, however, the disease extended from one of our greatest charity schools to all quarters of the city. . . . Comparatively dormant during the winter, as the season became milder, it burst upon us suddenly and unexpectedly, continuing its work of devastation for three or four months with undiminishing fury. The following list of burials taken from the Bills of Mortality will give a sufficiently accurate idea of the advance and decline of the disease—

1819	Deaths from small-pox	Deaths from other diseases	Total of deaths
January,	3	61	64
February,	0	71	71
March,	2	68	70
April,	15	61	76
May,	73	63	136
June,	156	70	226
July,	142	61	203
August,	84	63	147
September,	42	96	138
October,	10	63	73
November,	2	62	64
December,	1	83	84
	530	822	1352

The greatest mortality occurred in June when 43 were buried from small-pox in one week. The rapid declension of the disease from that period is obvious from the above table; and it was so nearly extinct at the end of the year, that I could not find a variolous patient from whom ichor could be procured for an important experiment. As probably one in six of all who were affected by the epidemic died of it, I am convinced it is not far from the truth to assert, that considerably above 3000 individuals, or a thirteenth part of the whole population of Norwich had small-pox in the year 1819."

It is always sound policy to take what is considered the case against us at its worst; and as this dreadful Norwich epidemic is cited as evidence of what is possible in the absence of vaccination, and as something that opponents of vaccination should regard as conclusive against them, there is cause to give it special attention; and the more so as the leading facts are well ascertained. First, however, we would remark that we have no desire to minimise the horrors of small-pox: it is a loathsome, and, because preventible, a discreditable disease: but neither let us maximise its horrors, but try, at least, to recognise facts in their true dimensions.

530 died in Norwich of small pox in 1819 of 3000 supposed to have had the disease, the deaths being, as commonly estimated, one in five or one in six of those affected. The deaths from all diseases in Norwich in 1819 were 1352—a mortality of 30 per 1000, a high rate, but not infrequent in similar populations free from small-pox. We have next to observe, that if 3000 had small-pox, there were 37,000 who escaped, and to ask how did they escape? By what means were they protected? It may be replied that a fourth of them were vaccinated; but how does that account for the immunity of 30.000 unvaccinated? The 10,000 vaccinations reputed to have been effected in Norwich from the beginning of the century were the work of nearly twenty years, and the major part of them in 1819 must have been represented by adults practically out of the range of infection, protected not by vaccination, but by their years.

"Protected by their years! What do you mean?" exclaims a reader.

Precisely what we say—that in the Norwich epidemic, as in variolous epidemics generally, adults are comparatively secure, and the young, and especially infants, are the victims. In

Norwich, in 1819, scarcely a bread-winner, or a father or mother was laid in the grave slain by small-pox.

"It is incredible!"

It is incredible simply because the facts of small-pox are persistently overlooked. Here is proof of the incredible in a statement carefully prepared by Cross of the ages of the 530 who died in the Norwich epidemic—

Under two years of age, - -	260
Aged from two to four years, -	132
,, four to six years, -	85
,, six to eight years, -	26
,, eight to ten years, -	17
,, ten to fifteen years, -	6
,, fifteen to twenty years,	2
,, twenty to thirty, -	2
,, thirty to forty, - -	1
	530

It will be said, as matter of course, that if these children had been vaccinated they would not have perished; but the answer is that at this day the chief mortality of small-pox is among the vaccinated young, in whom the whole virtue of the rite may be supposed to abide fresh and efficient. Cross was an enthusiastic vaccinator, but he allows, with due excuses, that the vaccinated minority contributed a certain quota to the sick and the dead, and that the ill repute of vaccination caused many in their terror to resort to small-pox inoculation, and thus to incur and diffuse the mischief of which they stood in dread. Some old women and a druggist were, he says, responsible for four or five hundred of these creations of small-pox during the epidemic, "each of which became a centre of contagion."

Age, we said, constituted the chief protection from small-pox, but good houses and good fare formed another line of defence. "The effects of the Norwich epidemic were confined *almost exclusively*," says Cross, "*to the very lowest orders of the people.*" Moreover, he observes—

"The disease was often aggravated, and made to assume its worst characters, by the most injudicious treatment. The prejudiced and most ignorant being the principal sufferers, the prescriptions of old women were more listened to than the advice of medical men. A practice kept up by tradition among the poor of the city for above a century was revived, in spite of all remonstrance, as follows—

"'At the commencement to set the object before a large fire, and supply it plentifully with saffron and brandy to bring out the eruption; during the whole of the next stage, to keep it in bed covered with flannel, and even the bed-curtains pinned together to prevent a breath of air. To allow no change of linen for ten or more days, until the eruption had turned; and to regard the best symptom to be a costive state of the bowels during the whole course of the disease.'

"Such were the means by which the horrors of the epidemic were aggravated. The old nurses triumphed not a little in having an opportunity of showing their skill after it had been so long unexercised; nor was it often easy, among the deluded persons in whose families this affliction occurred, to persuade or compel them to adopt a different plan of treatment.

Such was the memorable Norwich epidemic. However dreadful, it was in nowise extraordinarily dreadful. If the death-rate was raised for a single year, it was reduced in subsequent years, and the average rate was recovered that accorded with the common obedience of the community to the laws of health. In Nature consequences are equal, and any temporary aberration is in the long run compensated for. If vaccination could have kept small-pox from Norwich, the citizens would have had in some other form the measure of disease that pertained to their way of life. We might, moreover, inquire, whether to escape an epidemic, severe as that of 1819, it would have been economical to put 40,000 people through the pains and perils of vaccine fever. Why should a universal affliction be incurred to avert a partial one?—an affliction confined to the young of the lower orders. The vaccination of Norwich from 1801 to 1819 would have cost far more sickness and death than did the small-pox of the same years. In short, if vaccination had conferred the immunity claimed for it, the price of the salvation would have been in prodigious excess of its value.

Evidence of another order of the inutility of vaccination appeared about the same time, 1820, in an account by John Thomson, M.D., of a varioloid epidemic in Edinburgh and other parts of Scotland.* The disease differed from ordinary small-pox in respect of the smallness of the pustules, which contained a milky rather than a purulent fluid, and began to dry up on the fourth or fifth day. In Thomson's words—

"The epidemic appeared to exhibit all the varieties of small-pox from the mildest to the most malignant; and it was curious to observe that the mildest forms as well as the most malignant were strictly vesicular eruptions, in which scarcely a trace of purulent matter was to be seen from their commencement to their termination."

Whether this epidemic was small-pox or chicken-pox was the question. It was chicken-pox said some. It was modified small-pox said others. It probably was chicken-pox said Thomson; and if so, he argued, chicken-pox should be accounted a variety of small-pox. The chief cause of uncertainty was that the vaccinated constituted the majority of sufferers—

"Had the unvaccinated alone been attacked," wrote Thomson, "nothing, it appears to me, but the most unreasonable scepticism could ever have suggested a doubt of the disease being genuine small-pox."

Thomson reported 556 cases in Edinburgh of which—

310 had been vaccinated;
41 had had small-pox; and
205 had neither been vaccinated nor had small-pox—

And William Gibson, surgeon at Robert Owen's mills, New Lanark, had 822 cases of which—

* *An Account of the Varioloid Epidemic which has lately prevailed in Edinburgh and other Parts of Scotland; with Observations on the Identity of Chicken-Pox with Modified Small-Pox.* By John Thomson, M.D. London: 1820. Pp. 400.

251 had been vaccinated;
11 had had small-pox, spontaneous or inoculated;
57 had neither been vaccinated nor had small-pox; and
3 had had small-pox and cow-pox simultaneously.

As in the Norwich epidemic, it was the young who were affected. Thomson says—

"The epidemic has been observed to attack those chiefly who were under ten years of age; *increasing years appearing in general to lessen the susceptibility to small-pox contagion.*"

Thomson supported his opinion that chicken-pox and small-pox were interchangeable varieties of variola with much cogent evidence and argument. He cited instances in which they occurred together, one constitution bringing forth chicken-pox where another brought forth small-pox, whilst the infection of one appeared at times in the manifestation of the other. The controversy is not one on which it is necessary to pronounce judgment beyond saying that the whole drift of philosophic pathology is now in Thomson's favour; and indeed at the time he wrote, his position would not have been seriously contested save for the discredit it accumulated upon vaccination. One of Thomson's correspondents, P. Mudie, M.D., of St. Andrews, stated the difficulty with artless force. He wrote, 18th October, 1818—

"Of late years I have remarked, that the disease called chicken-pox has been much more severe than formerly; and many of the cases occurring after vaccination, so much resembled small-pox, that *if my mind had not been prejudiced against the possibility of such an occurrence*, I should have pronounced the eruption to have been of a variolous nature."

Notwithstanding his experience, Thomson held firmly by vaccination. Whilst compelled to admit that it did not avert either form of variola, he maintained with curious fervour that it made the disease milder, as if to excuse his partial surrender of faith. We all see more or less according to our prepossessions, and we need not blame Thomson if with his perspicacity he was unequal to the entire truth. The vaccinated belonged to classes who were better housed, better fed, and better cared for than the unvaccinated, and if their ailment had been measles or pneumonia in place of chicken-pox, they would have all the same made better recoveries. Precisely the same error is made at this day: what is due to kindlier conditions of life is ascribed to vaccination.

Some tried to account for the manifest failure of vaccination on the supposition that the original virus had lost its force in transmission from arm to arm, but Thomson would not allow that it had deteriorated. He said—

"The vaccine virus used in Edinburgh for a series of eighteen years produces exactly the same appearances as are delineated by Dr. Jenner as characteristic of cow-pox. I know, also, that the appearances of the vaccine vesicle produced by this matter, which must have passed through a succession of at least 900 individuals, agree exactly with those exhibited by vesicles produced by inoculation *with the more recent equine matter with which I have been lately favoured by Dr. Jenner.*"

The latter words are noteworthy. When Jenner's ascription of the origin of cow-pox in horse-grease is referred to, the answer frequently is, that Jenner was mistaken, and that he did not persist in his opinion. It is true that he did preserve a judicious silence about horse-grease when he saw that it would hinder rather than help his fortune. But when he had obtained all he was likely to get, he resumed the expression of his original opinion, and used and diffused what he described as horse-grease, but which was probably horse-pox; and the vesicles raised by the equine virus, and the cicatrices which remained were identical with those induced by so-called cow-pox. To this fact, we perceive, Thomson bore clear witness; and the date, 1820, represents Jenner's mature conviction, being three years prior to his death.

An important contribution to the vaccination controversy was made by another Scotsman. Dr. Watt, of Glasgow, published in 1813 an essay entitled "An Inquiry into the Relative Mortality of the Principal Diseases of Children." Vaccination had been prosecuted with much energy in Glasgow, but when Watt surveyed the results, they appeared far from satisfactory. We seem, he argued, to have got rid of small-pox, but deaths are not reduced. Measles, which had been a mild disease, had become very fatal; and he conjectured that one disease had been dislodged to be replaced by the other. Baron says of Watt—

"Notwithstanding the proofs of the power of vaccination in diminishing the mortality from small-pox, it has been a question whether *infantile* mortality has been diminished; it having been supposed that the beneficial effects of vaccination were countervailed by a greater mortality in the other diseases of children. This very discouraging statement was published by Dr. Watt, of Glasgow, in an appendix to his work on Chincough [whooping cough]. This opinion, which was hastily adopted and unwisely promulgated, has unquestionably had a great effect in retarding the progress of vaccination. It, unfortunately, gave countenance to some of the worst prejudices of those who were opposed to the practice."*

And Jenner wrote to Moore from Cheltenham, 6th December, 1818—

"You probably may not have seen a pamphlet lately published by Dr. Watt, of Glasgow, as there is nothing in its title that develops its purport or *evil tendency*. The measles, it seems, has been extremely fatal in the City of Glasgow for the last four or five years among children, and during this period vaccination has been practised almost universally. Previously to this, the measles was considered a mild disease. Hence Dr. Watt infers that the small-pox is a kind of *preparative* for the measles, rendering the disease more mild. In short, he says, or seems to say, that we have gained nothing by the introduction of the cow-pox; for that the measles and small-pox have now changed places with regard to their fatal tendency. Is not this very shocking? Here is a new and unexpected twig shot forth for the sinking anti-vaccinist to cling to."†

* Baron's *Life of Jenner*, Vol. II., p. 248. † *Ib.*, p. 392.

Watt's position was in various details open to question, but the sagacity of his general conclusion has been abundantly confirmed in the course of years. If vaccination had diminished or suppressed small-pox, we should still have to maintain that it had not reduced mortality. Speaking in the House of Commons in 1878, Sir Thomas Chambers said, "You cannot prove that vaccination has reduced deaths or saved a single life." The House was astonished, and Sir Thomas went on to explain that epidemics of small-pox had never in this country raised the general mortality, but merely replaced other forms of zymotic disease. Even as we write there is an epidemic of small-pox in London, and the doctors and the newspapers are doing their utmost to terrify the people, and to drive them to re-vaccination if they would save themselves alive. Yet all the while the weekly reports of the Registrar-General show that in presence of "this dreadful and deadly epidemic," not only is the mortality of London not increased, but is considerably below the average, and that Londoners are in the enjoyment of "a healthy season." Nevertheless, with this fact broadly manifest, the drum of panic is incessantly beaten. So true it is, that "prejudice, which sees what it pleases, cannot see what is plain."

VACCINATION IN IRELAND.

THERE is a strong and rapidly growing feeling arising in Ireland against vaccination, and the tyrannical administration of the oppressive compulsory vaccination law. This is to be observed, not in any one province, but in several. Many parents are refusing to allow their children to be vaccinated, and wisely prefer paying the penalties rather than run the risk of an infection which has been described by Sir Thomas Watson, M.D. as "ghastly."

That celebrated physician, Dr. Hutchinson, says, "The facts now before the public will tend to rouse them, if they have not been roused already, from the false security into which they have been lulled. It is plain that our compulsory vaccination laws cannot be maintained unmodified."

What more is needed? This medical warning is unmistakeable. The people have been lulled into false security with regard to vaccination. It has not only failed to prevent or mitigate small-pox, but it has spread, and will spread, loathsome disease, no matter what sort of lymph is used. The great danger that now lies before us, is in the use of calf lymph (animal vaccine). How could this ensure us from being inoculated with animal consumption, when Dr. Creighton of the University of Cambridge gives the history of twelve cases of Bovine Tuberculosis in human beings, the disease being a more rapid form of *consumption* than that peculiar to man!

The poor in Ireland hate vaccination, but they are driven as sheep to the slaughter.

GEORGE COTTER BEALE.

Killiora Lodge, near Cork.

OUR OPPONENTS.

IN this contest against compulsory medicine which has now been carried on by means of organised efforts for more than twenty years, and by individual effort for a much longer period, our opponents, in whom I count the great body of the medical faculty, have proved themselves no mean adversaries. They have resisted our interference with their ancient rights, privileges, and prestige, with all that loyalty to traditions, and with that *esprit de corps* for which as a profession they have been so prominently distinguished. They have fought man to man, and shoulder to shoulder, to prevent any mitigation of the stringency of the Vaccination Acts, which we believe and know are yearly slaying thousands of our children. They have persistently shut their eyes to the overwhelming facts against vaccination, which can be witnessed whenever it is practised; they have ignored the revelations of the official statistics in the blue books, which confute their theories; they have suppressed the truth, *en bloc*, and have brought the pressure of their powerful influence—the influence be it known of a body (I will not say united, because on this subject they are in a state of hopeless confusion), but a body of 23,000 educated men, to mislead public opinion (I do not say wilfully) with a determination which has rarely been equalled and never surpassed. And in order the more effectually to carry out their designs, they have persistently closed the columns of all their journals, not only against ourselves, but against the most distinguished members of their own profession who have the courage to differ from them on this question.

Professions, says the *Times*, never reform themselves. The reforms come in all cases from the suffering and more open-minded people—the people who have no vested interest to protect, or professional prestige to conserve—the people made up of parents who have seen their children maimed for life, and whose hearths have been made desolate through this unwholesome rite; the people who merely wish to be allowed to preserve for their offspring that chief of blessings, the inheritance of good health with which God has endowed them.—*From* MR. WILLIAM TEBB'S *Address at the London Society's Conference.*

A LAWYER'S OPINION.—Without going into the medical question of Vaccination as a preventive of small-pox, I am of opinion that the compulsory power assumed by the State to enforce the operation is at variance with what I conceive to be the right of every member of a free community to determine for himself in such a matter.—SERJEANT JOHN SIMON, M.P. to Mr. Wm. Young, 28th April, 1881.

LADY CASTLEREAGH selected to have the vaccine matter injected in the leg instead of the arm; the result has been a frightful swelling of the glands of that limb, and consequently great pain and inflammation. Her ladyship has been confined to her room and sofa for more than ten days, suffering acutely, and it is not improbable that some weeks may elapse before she is able to put her foot to the ground or take exercise, and enjoy her usual habits of life.—*The World*, 27th April.

ANNUAL MEETING
OF THE
LONDON SOCIETY FOR THE ABOLITION
OF
COMPULSORY VACCINATION.

On Wednesday Evening, 18th May, the Annual Meeting of the members and friends of the London Society for the Abolition of Compulsory Vaccination, was held in Neumeyer Hall, Hart Street, Bloomsbury. The Hall, an elegant and commodious building, was filled with an intelligent audience, and many ladies were present, although the weather was unfavourable. The platform and chairman's table were adorned with growing plants and vases of flowers.

Mr. P. A. Taylor, M.P. for Leicester, President of the Society, occupied the Chair, and he was supported by Professor F. W. Newman, Rev. Dr. Seddon, Dr. Nichols, Dr. Haughton, Dr. Pearce, Mr. Enoch Robinson, M.R.C.S., Mr. W. J. Collins, M.R.C.S., Mr. Wm. Tebb, Mr. Alexr. Wheeler, Mr. H. Pitman, and Mr. Wm. Young, Secretary.

The Secretary said he had received many letters from Members of Parliament and other influential persons expressing their sympathy and approval, and regretting unavoidable absence. Amongst the writers were Lord Clifton, Mr. Fry, M.P., Mr. Sergeant Simon, M.P., Mr. Burt, M.P., Mr. Milner of Keighley, and Dr. Hubert Böens of Charleroi.

The Chairman, who was heartily cheered, observed—The principal business we have before us is to arrange for our future proceedings, and to define for ourselves and for the public what are our aims, our intentions, and our means. And first, let me define for myself my position. The question of my consistency or inconsistency upon this or any other question is of no further matter to you or to anybody, except in so far as it may to some extent diminish the possibility of my being of as much service as I should like to be; and I should therefore like to tell you in a few words what has been and what is my position in the matter. I was upon the House of Commons Select Committee who sat in 1871, and was appointed, I think, on the motion of my esteemed friend the late Mr. Candlish, M.P. for Sunderland. Upon that Committee I sat, and it has been thought inconsistent that, after having signed the Report of that Committee, I should now be taking a part in the agitation against vaccination. I am free to confess that at the time I sat upon that Committee, I had not in any degree considered or studied the question of vaccination. I believed implicitly in vaccination, as I believe ninety-nine out of every hundred persons do who have never had an opportunity of studying the question. We believed without hesitation or doubt in the absolute tradition which was handed down to us in the medical profession, and of which almost every member was an enthusiastic upholder. Not the less was I an opponent of *compulsory* vaccination, for I felt strongly that it encroached upon our civil rights and political liberty. (Hear, hear.) The question of compulsion I have from that time more or less continuously and energetically kept before me, and in endeavouring to come at the truth upon the whole subject, I have naturally been driven to examine the history of vaccination, and to criticise closely statistics and arguments or statements by which it was upheld by the medical profession; and I found myself presently coming, much to my astonishment, to the conclusion that vaccination was a pure delusion, that it was a simple superstition; not that there was a balance of evidence, something to be said upon one side, and something to be said upon the other, but that it was an absolute folly, and that, historically, it had been from the time it was introduced into this country an absolute failure. (Applause.) Its failure has been continuous, and that failure has from time to time been admitted by the medical profession itself. Of course its failure was excused by some special and obscure reason, that it might, could, would, or should have been a success. (Laughter.) I repeat that vaccination has been an entire failure. (Hear, hear.) Therefore I have felt myself bound to come forward upon this question, and all the more because I signed that Report before I had any knowledge on the matter; because it has rather been my rôle since I have been in Parliament to be the upholder of "forlorn hopes"; and because it might well be supposed that hardly another member of Parliament, holding the opinions upon this matter that I do, would find it convenient or possible to throw himself into this question with the energy and zeal which I have determined to do. (Applause.) Nor is compulsory vaccination in any degree in the form of a mere speculative grievance—it is a very practical and real grievance. So obnoxious is vaccination to the people in many parts of the country, as our opponents admit, that they have declared that if compulsion were given up vaccination would be nowhere! (Hear, hear, and laughter.) The opposition to vaccination is so great, because there are thousands and tens of thousands of parents and children in this country who are suffering severely from the effects of this law. I know of no condition of things more pitiable and discreditable than for parents to be compelled under the quackery of this miserable system to pay fines or go to prison for refusing to have their children vaccinated because other children of theirs have been killed or diseased by vaccination. (Hear, hear.) I am continually receiving letters from people accompanied by distressing photographs, showing the disease which vaccination has implanted upon their children. It is impossible to get compensation in these cases of injury, and I never mention them in the House of Commons because, of course, they would only have force in a court of law, where each case could be specially examined. The only illustrations I bring before the House are masses of facts that affect populations and not individuals; but not the less have these cases brought home to my mind, and I am sure to all those who are interested in this matter, the vast amount of distress and suffering and wrong which compulsory vaccination is causing throughout the country. (Hear, hear.) A much more serious

view of the matter must however be taken now. It may be doubted from the divisions in the doctors' ranks whether they are not, under the name of vaccination, inflicting a large amount of small-pox upon the population. (Hear, hear.) You will remember, I have no doubt, that some time ago Sir Thomas Watson, M.D., wrote an article for the *Nineteenth Century* deprecating the custom which had prevailed, especially in Brighton and other places, of procuring lymph by inoculating calves with small-pox. That had been done in many cases, and Sir Thomas Watson emphatically declared that it was nothing less than inoculating the population with modified small-pox. Well, we are told now by the new light upon the matter, Dr. Carpenter, that vaccinia and variola, cow-pox and small-pox, are essentially and identically the same disease in type, the only difference being one of degree. Well, if that be so, and we are to go on with the system of vaccination, it will be necessary to repeal that part of the law which declares inoculation penal. (Hear, hear.) It may be thought, Why cannot we go on without making any great effort as we are resolved to do now?—that surely truth is likely to prevail, and that the general feeling of the population is sure to have its effect? But we have to labour under two very special difficulties, difficulties entirely unlike those which affect any ordinary political question. We have the medical profession witnessing against us, and we have the Press of England at the feet of that medical profession. When I say we have the medical profession against us, that needs much explanation and diminution of expression. I think that what for a long time made it almost impossible for me to be a convert to the entire evil of vaccination was, that I thought every medical man vouched for his belief in its being a preventive of small-pox. But, on examining the question historically, I found that that supposed universal opinion tapered away until it became a very small thing. Vaccination by no means took the profession by storm when Jenner first brought it forward, and it was only when it became the fashion that it gradually spread. I have a long history of that, which I shall have to tell the House of Commons one day, but I will not trouble you with it now. The fact is, there was a time, apparently about the first ten years of the century, when it was a question whether vaccination should be denounced as quackery or be maintained as a divine law. At that time Jenner himself wrote to Dr. Woodville imploring him not to make public the condition of his hospital, because Jenner said it would, if known, ruin the practice of vaccination. Well, it got over that difficulty; it was declared to be a divine law, and henceforth it became as sacred as the Thirty-Nine Articles, to be signed without question. (Laughter.) When I speak of the medical profession, I must say that I believe the active members of that profession, the medical experts who cheat the public and denounce us on this question are very few; they might almost be numbered on one's fingers. When you read the articles in the newspapers in support of vaccination, you may be pretty sure that they are written by some of these half-a-dozen men—Ernest Hart and Company. (Hear, hear.) They seem to form a strong army because, like the forces upon the stage, they go out at the left wing and come in again at the right wing. (Laughter.) Now, I have made it my constant practice since I took up this question to talk to every medical man I meet upon the matter; and I have found that they neither know, nor (in almost every case) pretend to know anything about it: they simply referred me back to Jenner. O, said they, if you go behind Jenner, we have nothing to say. Now we come to this further peculiarity, that when we go back to Jenner, we find that every one of his assertions is now universally denied; while if they come to statistics, I find that figures are wholly against them. Jenner declared that the remarkable thing in cow-pox was that it protected from small-pox through the whole of life. No medical man ventures to say that now. Jenner declared it was absolutely impossible to inoculate with any other disease a person who had undergone vaccination. No medical man dares to say that now. Jenner declared that one mark upon the arm was quite a sufficient protection. That theory also is now exploded, and I should not wonder if presently they say that forty marks are necessary, because that would leave scope to account for the failure of vaccination in every case. (Laughter.) I have found, almost without exception, that medical men do not profess to know anything about it, and why should they? Those I meet are the medical men who attend upon the middle and upper classes. Those are not the classes which suffer from small-pox. It is down in the dens and purlieus of London, where every sanitary regulation is wanting, where the people are crowded into filthy holes, so that they are certain to be destroyed by one epidemic or another; it is there that small-pox finds its lair and its victims. It may be that these medical men I talk to do not see half-a-dozen cases of small-pox in a year, and they cannot generalise and reason upon those half-a-dozen cases. They are imbued with a foregone conclusion in favour of vaccination. If the patient lives, they say he has been saved by vaccination; if he dies, they say it was a terribly bad case, that nothing could have saved him, or that the lymph was imperfect. (Laughter.) Well, it is not such men as these, but the few experts who have the absolute command of the press. That is a thing it is very difficult for me to understand. The Press for the most part absolutely ignores and refuses to receive our communications. (Shame.) The medical journals even refuse to insert our advertisements of books or pamphlets, or the statistics and facts we collect. I am glad to say that within the last fortnight the *Times* has consented to put in various communications, some of mine amongst others, which is very much to the credit of the fore-knowledge of the *Times*, and much to the credit of its courage. These experts, therefore, make use of the Press in town and country to put forth their false statements and their sophistical conclusions. Their statistics are very much cooked before they are

presented, and we have absolutely no means of answering them. And the stuff that they write is something prodigious! Either they put forth facts and figures which are not true, or facts and figures which prove nothing and are wholly irrelevant, while the conclusions they draw are as foolish and extravagant as can well be imagined. Here is half a joke that the *Observer* of Sunday put out. It congratulates the country that on that very day (14th May, 1796,) Edward Jenner satisfied himself of the perfect immunity produced by vaccination, a boy named Phipps having been vaccinated in the arm, and afterwards inoculated in the arm, and could not take it! I sometimes fancy that the people who take up vaccination in this way seem to to lose their logic and their intellect. (Hear, hear.) What comfort is it to us to be told that a boy could not be inoculated with small-pox after vaccination ninety years ago, when, with or without inoculation thousands of persons take the small-pox after they have been vaccinated in this our time? If these persons had taken the trouble to study the history of vaccination they would have found that Jenner himself declared that a large proportion of the population are absolutely insusceptible either of cow-pox or small-pox. Here is an extract from the *Times*—it is Ernest Hart and Co. again. (A laugh.) After referring to the vaccination and supposed protection of the Post Office officials and so forth, the *Times* says—"Any one who takes this precaution is perfectly safe; and it follows that no one need have small-pox unless he or she please." It is a piece of amazing effrontery for the Press to put forth such a statement as that in a population which is trembling at small-pox, although, according to Dr. Carpenter, the inhabitants of the metropolis are vaccinated in the proportion of three hundred to one. (Hear, hear.) Then take the *Spectator*. The *Spectator*, which ought to know better, published a long letter the other day from Dr. Carpenter, and refused to insert any answer to it—(Shame)—refused, I am told, on the ground that it was a medical question, and settled amongst medical men. (Oh!) Then I say they should not have admitted the article. It is falsifying the duty of the Press to take up such a position. The Press should be not merely a pulpit from which the proprietors put forth their own principles and views, but it should be an arena for public discussion; and if not an arena for public discussion, then it should not admit one side of that discussion only. (Hear, hear.) What wonder that a few days afterwards I received this message from a friend—"We have been impatient to see an answer to the letter in the *Spectator*, and as none has appeared we are forced to conclude that none can be given." I thought I could not better occupy your time for a few minutes this evening than by analysing, shortly, this article by Dr. Carpenter. (Hear, hear.) I have said that when these medical experts or scientists attach themselves to the process of vaccination, they either put forward facts or figures which are not true, or which are negative; or they draw wrong conclusions. I will point out to you every one of these evils in this letter of the great scientist, Dr. Carpenter; and I, for myself, have failed to find in it one single logical or sensible reason for the practice of vaccination. You are aware that Dr. Carpenter was answering an excellent article on the medical profession which appeared in the *Modern Review*, and which I strenuously advise all our friends to read. The point of the article he takes up is the vaccination part only, and he begins with defending the doctors by repudiating the position that the doctors uphold vaccination for the sake of the £55,000, or thereabouts, paid for it. Now, I am not one of those who charge, or ever have charged, the medical profession with any thing like falsifying their knowledge of the truth for the sake of money or any thing else; but I say they are tied to an ancient superstition, and I cannot blind myself to the fact, that the unconscious action on the mind of a money gain, combined with the traditional opinion of others, tends very much to prevent an individual subject to these influences from honestly and seriously criticising results. (Hear, hear.) Now, is it quite honest of Dr. Carpenter to talk about the mere £55,000 voted by Parliament for the expenses of carrying on vaccination? This is not where the profession make their principal gains by vaccination. Why, there is not a medical man in practice in the middle and upper classes who does not, under this system of vaccination, get a regular poll tax in every family he attends—from every infant that is vaccinated, and from every noodle that is re-vaccinated. (Hear, hear, and laughter.) Dr. Carpenter also claims great credit for the profession from their urging vaccination upon an unwilling population in direct opposition, he says, "as can easily be proved, to their own interest." Now, that is a form of reasoning which is known under the name of "begging the question." Dr. Carpenter assumes that vaccination saves from disease, and therefore, he says, the doctors lose by it, because there would be more disease if they did not vaccinate. But Dr. Carpenter has to prove, in the first instance, that which is his thesis—that vaccination does prevent, instead of, as we say, causing disease. (Hear, hear.) Then he goes on to a higher flight. One of the arts of the defenders of vaccination is greatly to magnify the dread, and terror, and amount of small-pox before vaccination was known. He says—"None but those who have studied the medical history of the last century, have the least idea of the ravages then committed by small-pox." The writer is clearly ignorant of the fact that a hundred years ago the small-pox mortality of London alone (with its then population of *under a million*) was often greater in a six months' epidemic than that of the *twenty millions* of England and Wales now in any whole year. I thought that an astounding statement, and I went to look at the figures, which one always should do when they have to answer the arguments of these medical scientists. Instead of epidemics in London causing more mortality then than now, these are the facts. The highest mortality in London, in the last century was 8992; and the learned doctor has just acknowledged, three lines before, that in England and Wales

upwards of 14,000 had died in three years, 1870-2. He then goes on to talk about the terrible mortality of children;—eight per cent, and so on—so that anyone who had not looked into the question would be led to conclude that all the youthful part of the population of these islands would be swept away by small-pox. The doctor must know—or, if not, he should not have written on the question—that there is no distinct relation whatever between the deaths by small-pox and the total mortality of the country. Instead of small-pox increasing the general mortality, it is remarkable that it is usually the other way. I was looking the other day at the returns of mortality in London during the last century, and I found that in many cases when an epidemic of small-pox was worst, the total deaths in the whole community was by no means so high, and *vice versâ*. (A voice—"And it is so now.") Therefore, all this attempt to frighten the people by talking of the wholesale sweeping away of the population is founded upon gross error. (Hear, hear.) Then we come to that time-honoured story about the "pitting" which was so prevalent before vaccination, and that nobody ever sees now. The learned Doctor tells us that in the beginning of the century one out of every three persons was pitted with the small-pox. Well, I cannot go back so many years as the learned Doctor, but I can remember for fifty years, and I can only say that is not my impression. Well, but it proves too much, because vaccination has only been known in this country for eighty years, and are the tens of thousands of people between sixty and eighty more pitted than the younger members of the population? No one will be bold enough to say so. Why then are people not pitted now? Because we must presume that the abominably cruel and ignorant medical practice of eighty or a hundred years ago has been amended by the profession. They have no escape out of that. They cannot say it is because people do not take the small-pox now, because they do take it in tens of thousands. It cannot be because the attacks of small-pox are less virulent since vaccination, because the doctors are always preaching to us that but for vaccination small-pox would be even now—as they say it is amongst the non-vaccinated—more virulent than ever. So much for the "pitting" story. Again he says:—"The medical history of the last century clearly shows that every child born into the world was proved to have just the same congenital liability to small-pox that it has to measles or whooping cough; its immunity depending solely on non-exposure to the contagion. Thus in Iceland, towards the middle of the last century, a small-pox epidemic carried off 40,000 persons—*one fourth of the total population*—in six months." It may be so, or it may not be so, but that goes no way to prove that vaccination cures small-pox. We are told that three-fourths of the population of Fiji was swept away by an epidemic of measles a few years ago. But the learned Doctor forgets that all this has nothing to do with whether vaccination prevents small-pox. He proceeds to say that in Iceland small-pox carried off towards the middle of last century 40,000 people. But that does not prove that vaccination would have prevented the epidemic. (Hear, hear.) It is but a negative argument. In fact the doctor creates the population, I suspect, in order to kill them off by small-pox. (Laughter.) I had recourse to my *Encyclopædia Britannica*, and where the 40,000 persons who died came from, I don't know, for the population in 1703 was 50,444, in 1769, 46,201, and in 1850, only 59,157. All this is evidence of the extreme looseness of the reasoning of those who have their brains softened by adherence to vaccination. (Hear, hear, and laughter.) Then they tell us about the Post Office people who have not had the small-pox. Well, but that is only very negative evidence at the best. There are clusters of many thousands of persons in a population of four millions who have not had small-pox, and would not have it under any circumstances. And so enamoured are the pro-vaccinators with these general figures that they do not stop to tell us what proportion these 10,000 Post Office people bore to the whole population of four millions, and whether the mortality was more or less than the average. It reminds us of Jenner's statement that perhaps vaccination would even cure the plague; that 6000 persons in Constantinople had been vaccinated and not one of them had taken the plague! (Laughter.) Dr. Carpenter makes a comparison with Malta, where, he says, "small-pox was practically extinguished by the universality with which vaccination was there practised." Hearsay and assertion! We know sufficiently well that there is no foundation for these stories about vaccination stamping out small-pox. Eleven years ago, as we were told in the Select Committee, vaccination had stamped out small-pox in Scotland, that only 114 died; but in 1871 1400 died, and in 1872 2400 died. In Dublin it was asserted, fourteen or fifteen years ago, that small-pox had been absolutely stamped out. In 1870 only 5 died; in 1871, 207 died; and in 1872, 1350 died. In fact, people die of small-pox when it is epidemic, and they don't perish from the disease when there is no epidemic; and apparently of all the factors that may come into play, vaccination is absolutely nowhere. (Hear, hear.) Now, the Doctor says that "it is to the surviving of a small residuum of unvaccinated children that we owe the lingering of small-pox in our midst." This is one of those assertions that *ought* to be true, which *ought* to have followed the success of vaccination. Had there been any virtue in vaccination, we should have seen, as was prophesied, that epidemics would have ceased. Has that been the case? Distinctly and absolutely the contrary. (Hear, hear.) From a most valuable work lately published by Dr. Voght of Berne—a work that alone is sufficient to expunge the law of vaccination from our statute book—I have culled these very remarkable figures, showing that if all the elements exist for a mortality of small-pox, vaccination is nowhere, that small-pox comes in epidemics both in respect of time and place. Here I have the fourteen years from 1864 to 1877. I will give you the highest and the lowest

mortality from small-pox in various places, by which you will see that the law of epidemics prevails as absolutely as before vaccination was instituted:—

Deaths per 100,000 inhabitants, 1864 to 1877 inclusive.

	Lowest Year.	Highest Year.
Munich,	0	93
Stockholm,	2	132
Frankfort,	0	140
London,	2	242
Antwerp,	2	321
Cologne,	1	336
Liege,	2	341
Breslau,	1	371
Prague,	15	398
Vienna,	7	517
Paris,	1	572
The Hague,	1	1410
Rotterdam,	1	1428
Hamburg,	1	1544

These figures are absolutely destructive of the theory that it is merely amongst the remnant of unvaccinated persons that the mortality continues. And now take it for the same year in various places. I will give one year only.

Deaths per 100,000 in 1870.

Munich,	1
Stockholm,	80
Frankfort,	140
London,	242
Cologne,	336
Prague,	15
Berlin,	631
Trieste,	26
Rotterdam,	1428
Hamburg,	1544

Well, the learned Doctor nevertheless maintains that three things are proved—first an enormous reduction of liability to small-pox by a single vaccination. You all know, I dare say, the *hocus pocus* by which that is produced. He takes the number of cases in the London hospitals; he then attempts to divide them between the vaccinated and the unvaccinated, and says that while very few are amongst the vaccinated, a much larger proportion, *pro rata*, are amongst the unvaccinated. That is an utterly delusive mode of classification, as is now admitted by the doctors themselves. The *Lancet* some time ago remarked that the Local Government Board had given up the habit of publishing these things because they were delusive. In the first place, the *Lancet* admits that in many cases when there have been undoubted marks of vaccination, they disappear. Many persons go into the hospitals in the last stage of the disease only to die, and the marks are perfectly invisible. Moreover it all amounts to nothing, because the unvaccinated portion of the population must, *ex hypothesi*, be carried off in larger proportion than the vaccinated, for these two reasons:—in the first place, when children are unhealthy the doctors dare not vaccinate them; and in the second place, the unvaccinated live under unhealthy conditions in the insanitary parts of London, where, of course, the mortality is greatest. His second proposition is the enormous reduction in the fatality of the disease. Well, figures show that the mortality from small-pox in the last century was 18 per cent. of those who took the disease. The disease is somewhat more fatal now, but that, of course, they get rid of in the same summary way by declaring that the larger proportion is of the unvaccinated; and so they come to this ridiculous conclusion, by means of these false and cooked statistics, viz.:—that amongst the unvaccinated there die now 40, 60, 80 per cent. against 18 per cent. in the last century when vaccination was unknown! (Hear, hear, and laughter.) I can only say that they accuse themselves by this statement of being wholesale assassinators. (Hear, hear.) Dr. Cameron, who is, as you know, an enthusiast for vaccination "from the calf," has put it upon record that the heavy and increasing mortality from small-pox now proves either that vaccination is a myth or that the lymph has deteriorated. Besides everybody knows that individual physicians cannot out of their own practice cull any statistics worth having. It is the statistics of the great countries of Europe and the world that show the real facts. Look at Germany. In Germany, all must be vaccinated when they are born, when they go to school, when they enter the army or civil service, and yet there is no country in Europe which has suffered so heavily from small-pox during the last ten years as Germany. (Hear, hear.) Well, I say then, that in the face of such argumentation as this, which alone the Press admits; in the face of the enormous evils which are now suffered throughout our country from the compulsory vaccination laws, and which evils we are almost powerless to prevent or mitigate in the ordinary way, I think I may say for you as well as for myself, that we are resolved to make a great effort to right ourselves. (Applause.) We are now resolved to bring our best energies to the work, and to raise a sum of money that shall enable us to keep on working; and if we cannot get admission for our statement of the truth into the orthodox journals, we will so far as we can, set up unorthodox journals of our own. If we cannot match the delusive and sophistical statements sent out to all parts of London, we will follow them with our lecturers to expose them. This is the more necessary because the only place I have for publicity is the House of Commons. I did give publicity last year to a speech I made in that House, and which I caused to be taken down, so that it might not be buried beneath the records of the House, or suffocated in the reports of the daily newspapers. The chance of getting a night for a motion on the question this year is not great. I continue balloting, but with little hope; because the pressure of business has thrown everything back. Private members have no chance till nine o'clock, and then only when they get a first place. We can, and we must, bring public opinion to bear upon Parliament by agitation throughout the country. My friend, Mr. Tebb, will be able to tell you whether I have rightly stated our intentions and position. It is my in-

tention to devote specially, and almost entirely, my whole action to this particular question; and I am so absolutely convinced of the truthfulness of our cause, that I am really sanguine of a not very late triumph. (Loud applause.)

The CHAIRMAN—I have now to call upon our excellent friend, Mr. Tebb.

Mr. TEBB spoke as follows:—Mr. Taylor has so ably dealt with the statements made by Dr. Carpenter, and has brought such an array of facts in vindication of our principles, and has given us such proof of his determination, that I am sure we must all feel gratified and encouraged. If he speaks so resolutely and with such fearlessness outside the House of Commons, we may be sure he will do no less inside the House. (Hear, hear.) And I believe, and you believe, that our case is so clear and our facts are so unassailable that if they are once presented fairly and fully before the House of Commons our victory will be achieved at no distant day. (Applause.) The object of this Society is the repeal of the Compulsory Vaccination Acts, which compel the infliction of a disease upon every child born into the world—Acts of Parliament which predicate that no child can be considered a safe member of the community until that disease has been inflicted. We say—to state the case is to condemn it. (Applause.) The whole system is monstrous. (Hear, hear.) The theory of vaccination is based upon such fallacious statements as you have heard refuted to-night, such statements as that in the *Spectator*, that were it not for vaccination we should have a recurrence of those deadly epidemics which prevailed in the last and previous centuries. Mr. Taylor has so thoroughly dealt with that part of the subject that there is little to add; but I would say this, that it is unfair to compare a condition of things totally different from what prevails at the present day. At the period of which Dr. Carpenter speaks sanitation was unknown; London was built upon cesspools; there were about 20,000 human bodies annually interred within the precincts of the metropolis; there was no system of sewerage, and the water supply was tainted. Macaulay relates that many of the public squares, which now afford us so much enjoyment and are so useful to health, were then the receptacles of filth and offal, and were the hot beds of disease. Is it any wonder that epidemics, such as small-pox, black death, and sweating sickness, should have been common in those circumstances? We say that if you could restore those conditions you would have the diseases that Dr. Carpenter says we have got rid of through vaccination. (Hear, hear.) We say that to bring forward such arguments as this is unworthy of the scientific reputation of Dr. Carpenter, or indeed of any sensible man. Is it a wonder, in the presence of the overwhelming facts against vaccination, that opposition should have been manifested? This opposition has been aroused against these Vaccination Acts in every country where they have been enforced, not only in England, but on the Continent, in Germany, in some of the Cantons of Switzerland, in Sweden, Holland, and to a certain extent in Belgium, France, and the United States. In such places as Keighley, Bingley, and Leicester the opposition has broken down the machinery of compulsion. In Dewsbury some years ago there were 6000 children unvaccinated. In Bedford a few months ago 40 persons were brought up for non-vaccination, and so strong was the sympathy on the part of the magistrates and in the community that the anti-vaccinators were only fined sixpence each. Well, and what are the consequences of this defiance of the law? If the theory put forward by our adversaries were true, they would be able to demonstrate the truth by illustrations from those places. (Hear, hear.) But, on the contrary, we find that in Keighley, in Dewsbury, in Leicester, Boston, Bedford, and other places where there is the least vaccination, small-pox is rarely found. At Keighley, where only 12½ per cent. of the children are vaccinated, according to the last official report of the Guardians there has been no case of small-pox since 1875: but here in London, where, according to Mr. Sclater Booth, 95 per cent. of the children are vaccinated, and many persons are re-vaccinated, we have a constant epidemic of small-pox. If medical men would open their eyes to facts like these, is it possible the system should continue? I think not. Mr. Taylor has alluded to the fact that this agitation against compulsion has been carried on under circumstances of great disadvantage. We have had the Press practically closed against us. The medical journals and the medical associations will hear nothing against their pet theory of vaccination. Vaccination has been lauded as the greatest discovery in medical science. Well, if that is the greatest, I should despair of the profession, and what would be the worst? (Laughter.) This greatest discovery in medical science stands on such a slender foundation that when a deputation of calf-lymphers waited upon Mr. Sclater Booth, while President of the Local Government Board, and asked if he would allow the calf-lymph system to be introduced, he said, "Gentlemen, let the system alone; the Acts are worked with great difficulty, and if you force my hand, the whole thing will collapse." (Hear, hear.) Well, Mr. President, vaccination being based on falsehood and injustice, has naturally created resistance all over the country. I hold in my hand two Parliamentary Reports; one of them, No. 44, is inscribed, "ordered to be printed, 6th August, 1875." That Return contains the particulars of 5000 prosecutions, extending over five years. (Hear, hear.) Our Secretary, Mr. Young, has examined that Return, and he finds that whole towns where vaccination prosecutions had been carried on systematically have been omitted. He finds the cases of persons whom we know have been brought before the magistrates again and again are not entered at all; and the Return is so full of omissions that Mr. Young says he is quite sure that not more than half the prosecutions are recorded. Here is another Return published this year. It was ordered to be printed 18th March, 1880. That Return contains particulars of about 6400 prosecutions in four years, at the

rate of about 1600 a-year; and if you look down this record you will find the same names occurring again and again, men and women also, who are willing to suffer fine, distress, and imprisonment, rather than submit their children to what Sir Thomas Watson calls the "ghastly risk" of vaccination. But who are these men and women? Are they criminal members of society? are they drunkards, or wife-beaters, or disturbers of Her Majesty's peace? You know they are not. These men and women are honest, upright, law-abiding, conscientious, intelligent citizens; they are the salt of the earth; they are the true successors of those men and women who by their fidelity to truth, by their obedience to conscience, by their suffering for the right, have in times gone by, given us that inheritance of liberty of which we are justly proud, but which this medical faction has so cruelly crushed out. (Applause.) When the present Government came into power, they were fully alive to the cruelty and injustice that prevailed under the Vaccination Acts. I must always speak with respect of a Government which has at its head a man so transcendent in ability, so pre-eminent for his public services as Mr. Gladstone. (Applause.) I must also speak of a Government with respect that numbers amongst its chief councillors a man who has done so much for the country, and whose tendencies are so much in favour of justice as those of Mr. John Bright. (Applause.) Well, when this Government came into power, they said that this injustice must continue no longer; they felt that this system was a reproach to the Government, and a disgrace to the nation, and they determined if possible to have it altered. They brought in a Bill to repeal cumulative penalties. What happened? You know what happened. No sooner was the announcement made, than Mr. Ernest Hart said, "the entire medical profession is filled with alarm and regret." Alarm for what? Was it for the fees? Was it for the probable reduction in their income for vaccination? I don't say it was, but the cry was very much like that of the Ephesian silversmiths of old, "Our craft is in danger." (Hear, hear, and laughter.) I would not speak severely of a profession which contains many of my intimate friends, men of noble courage and who are on our side; but the medical profession generally sent in petition after petition, and deputation after deputation to oppose any modification of the stringency of the law. There was not one deputation got up by the people, nor has there ever been a public meeting or a petition got up by the people in favour of vaccination so far as I have been able to discover since the system was initiated. (Hear, hear.) Well, when the Government received the medical petitions and these numerous deputations, they seemed bewildered, and faltered, and shall I say ignominiously retreated; at any rate the Bill was given up and a privileged class triumphed over the nation. (Shame.) I believe Mr. Dodson was thoroughly disgusted by his persistent assailants, for to the last medical deputation on the 2nd August, he gave a somewhat curt reply, and at the close he said, "Gentlemen, medical opinion is entitled to great weight, but it is not entitled to outweigh all other opinion, particularly the opinion of those who have to administer the law." Well, sir, the question for us to consider to-night, individually and collectively, as members of this Society and interested in this question, is, "How shall we get rid of this tyranny?" Mr. John Bright says the law "is monstrous and ought to be repealed." I do not think that any of us have used stronger language than that. How are we to get rid of this "monstrous" law? It must be by rising up to a noble zeal in the great work before us. Mr. Taylor has told us what he will do. Let us resolve what we will do. We contend against a cruel injustice, our exertions must be equal to the vast opposition to be overcome. We must be willing to spend time, and energy, and resources, to rid the country of this infatuation. The London Society needs your moral and material support. We have now a trusty leader; a man who has the courage of his convictions (Applause), a man who is not afraid of "minorities." He has often been in minorities before, and by his sheer persistency we have seen these minorities swell into majorities. We must help him all we can, and if we do our duty as well as Mr. Taylor does his duty, we shall soon make it possible for him to carry the standard of our cause—which is the cause of parental right, of humanity and justice—to a successful and triumphant issue. (Applause.)

Professor NEWMAN—I really feel myself out of place after the speeches I have just heard. I cannot pretend to have any such knowledge of the subject as either of the previous speakers, but I will try to mention a few things—so ample is the topic—which they have not touched upon. One point touched on by Mr. Taylor might be more strongly dealt with, namely, that the years of principal small-pox are years of somewhat reduced mortality. He told us that it was so in the last century. That was news to me; in fact I did not know there were records on the subject. (The Chairman—London alone.) But we have the fact from the pro-vaccinators in the tables they put out, for they are not our statistics. The celebrated Dr. Lyon Playfair stated in the House of Commons that vaccination saves 80,000 lives every year. This shows what huge mistakes our medical men are liable to make on this subject. Professor Huxley is zealous for vaccination, yet I believe he is as ignorant of the real argument as Dr. Carpenter is. (Hear, hear.) Dr. Carpenter is a man of European renown, and he is a friend of mine for whom I have the greatest respect. I received a copy of his letter to the *Spectator*. I think he must have sent it himself, and I read it with astonishment that he should say such things. I will not go over again what has been so ably spoken on already; but he seems to be ignorant of what all of us know; he deals with the subject like a man who has only heard one side of the argument, and who thinks that what has been said by his own profession should carry all before it. He speaks in such a tone as if we were bound to abide by the opinions of the doctors upon this topic. Now, I want to know why in

medical matters I, or any father of a family, should be more bound to obey physicians than to obey clergymen. We know what was the doctrine of the church when it got the ear of statesmen and kings — what cruelties were practised. What was the argument? Why, they said, "A man who holds opinions different from ours is a pest not to society only, but a pest in the other world as well as in this world. He is a poison; we must put down poisons; he is a poisoner of mankind, and we call upon the civil power to execute him, to burn him, to get rid of him out of the world." And then the civil power humbly folded its arms and said,— "Yes, we must obey you, the clergy; you understand the secrets of the other world." Now, it is supposed that medical men understand the secrets of disease and health. But if that were the case, how is it that medical changes are so vast? How is it there is such an immense diversity amongst the doctors themselves? I have lived long enough to have seen many and enormous changes in medical practice. I will venture to tell a little secret without the name of the eminent person who uttered it. I was in a drawing-room with a large number of persons, few of them known to me, when an eminent professor began to discourse concerning medical practice; and he said, — "The physicians have revolutionised their practice in the most vital points within the memory of men not old; they have changed it entirely, and now the humbugs tell us that it is the human constitution that has changed." I doubt if there was any one in the room who would have been brave enough to use that word "humbugs;" I should not; but when I remember the enormous changes in medical practice, I don't wonder that such a phrase should be used. I was operated upon for a fever in my younger days, and 220 leeches were put upon me, so that I wonder I am alive at this day. For three months I did not recover my muscular power. The doctor condoled with me when I got better by saying that most probably I should have disease of my heart if I recovered. No physician would now deal with a patient thus. We have abundant proofs that the faculty changes its practice. In the last century the doctors were most eager to enforce inoculation. My grandmother told me that the physicians were very desirous that she should inoculate my father; and she said, "God forbid I should ever give my child a disease. If he were to die I should never forgive myself." The doctor thought her a stubborn, foolish woman; however, she persevered, and my father never had small-pox. Now-a-days the doctors have prevailed upon Parliament to stigmatize inoculation and make it penal. Well, that is another change. Is there any reason we should believe this medical profession infallible more than we should believe a church which so called itself? We must judge for ourselves. We have a right to our opinion in medical equally as in religious matters. I want to know what right Dr. Carpenter or anybody else has to claim that I shall submit to his views and arguments. I think we understand logic and the laws of health as well as other men. Like the Chairman I had no disbelief in vaccination until I was inclining to be an old man, and what was it that first opened my eyes? Well, my friend Mr. Henry Pitman, whom I see here, told me one or two facts concerning vaccination causing disease. But what opened my eyes more fully to the rottenness of the whole thing was the arguments of the doctors. Before I read them I believed in the doctors; but when I read their arguments I found there was nothing in them. (Hear, hear.) They tell us in the most distinct way that it was inoculation which extended small-pox so widely in the last century, and by extending it made it so fatal, because others caught it. Yet while they tell us that, they will not make any allowance for the diminution of the disease when inoculation was disused. (Hear, hear.) Well, as soon as vaccination was heard of, inoculation was disused; and now Dr. Carpenter makes no allusion whatever to that fact. (A Voice —It would not suit him.) He attributes everything to vaccination, whereas I understand that a very small percentage of the population was vaccinated in the early part of the last century, therefore vaccination could not be the cause. There is a cause at hand, but they do not notice it; and then they produce a thing which cannot be the cause. (Hear, hear.) Again, Dr. Carpenter does not allude to the fact that the mortality is somewhat less in the years when small-pox is most prevalent. Surely, that indicates that the disease of small-pox falls upon the weak persons, those who have a tendency to take that disease, and who would else have died another way; and the portion that would have died another way does not die now, because the small-pox throws off their disease in an eruption. (Hear, hear.) There is only one thing more I will mention, because it strikes me forcibly, namely, that the mode in which the faculty argue leads men not to look to the real causes of disease. (Hear, hear.) We are told that the soldiers in the German and French armies were vaccinated and re-vaccinated, and yet we know that during the French and German war there was a tremendous amount of small-pox amongst them. When we know that the soldiers were crowded together in sleeping places under the most unhealthy conditions, we cannot wonder that small-pox occurred; and then the cry is "Vaccinate, vaccinate." Thus the doctors teach the people that they may indulge in every kind of evil habit if they will only be vaccinated. Evil habits and bad atmosphere must cause disease, and even if vaccination had the power to prevent small-pox it could not prevent disease of some kind arising from unhealthy conditions. Men will die of other things if they do not die from small-pox. It seems to me that this is one of the worst features in the proceedings of the vaccinating doctors—that they will not teach us to look after and remove the real causes of disease. (Applause.)

Mr. Taylor having to leave, the Rev. Dr. Seddon was requested to occupy the chair. On doing so, he said—I had no expectation that this honour would be thrust upon me. I do

not know that I have any claim to be heard. I have entered heartily into this matter as a minister of the gospel, and one of the guardians of Hackney. I felt it to be my duty. (Hear, hear.) At the Board to-day, a brother guardian, who is an M.D., said, "The feeling seems to be getting rather strong against vaccination." I said, "Yes, and evidently there will have to be a change." (Hear, hear.) One proof of my determination to do everything I can is shown in the placard before you. I have invited Dr. Pearce, who is well-known to you, to give us a lecture at our Tabernacle on Monday night, and then to invite discussion. I am going to invite every doctor I know, so that we may have the pros and cons, and I, as chairman, will see fair-play. (Applause.)

Mr. ENOCH ROBINSON, who was introduced by the Chairman as "a medical man of large experience," said,—Mr. Taylor dealt fully and completely with Dr. Carpenter's letters to the *Spectator* and the *Times*. I will, therefore, take as the text for one or two observations, the concluding remark of Prof. Newman, namely, that this system of vaccination stands in the way of true scientific research into this question. (Hear, hear.) One of the points mentioned by Dr. Carpenter, and which was not dwelt upon by Mr. Taylor, probably because it was rather a professional question, was, that every human being has a congenital liability to small-pox, and that so long as he possesses this congenital liability he is in great danger, and is almost certain, to have small-pox. Now this term, "congenital liability," is simply another term for one used by Mr. Simon, called "specific susceptibility" to small-pox. Now, Dr. Carpenter is a man of science; he has been President of the British Association for the Advancement of Science; but more than that, he is the author of the largest English work on Physiology; a work which has been before the public for twenty or thirty years, and is a standard book in medical schools. As a scientific man, possessing special knowledge in connection with physiology, we have a right to expect that when he takes up the cause of vaccination, he will say all that can be said from a scientific point of view; and also that he will be able to give us the minutest physiologial knowledge in connection with it. Therefore, when he speaks of a congenital liability to small-pox, and that by putting cow-pox into the human being, this congenital liability is removed, but that after a few years the body reproduces it, and you need to put in another lot of cow-pox to take it out again—then I come to ask these questions of Dr. Carpenter,—What is this "congenital liability"? Where is it in the body? What is its chemical composition? What is its name? What function does it perform in the body? Is it in any way necessary to the body? And how does the cow-pox get hold of it and take it out? (Hear, hear, and laughter.) You will see that this protective theory rests absolutely upon this dogma of congenital liability; because, if there is no such thing, the protective power falls to the ground. Now, is there any positive knowledge in existence as to what this "congenital liability" is? None whatever. They cannot tell us in what tissue of the body it is placed; they cannot give us its name; they cannot give us its chemical composition; they cannot tell us how cow-pox gets hold of it; but more than that, it is necessary, according to their theory, that it must be a specific kind, that it must be specially related to small-pox. They tell us that scarlet fever has a similar specific thing in the body that meets it, measles the same, and so on, and that the removal of one of those does not in any way diminish the liability of the patient to one of the other diseases. So that you see we want to know also from Dr. Carpenter what is the congenital liability of scarlet fever, where it is, its chemical composition, and so forth; and in fact we want a great deal of physiological knowledge from Dr. Carpenter in connection with this "congenital liability." Now there is nothing whatever in any of the physiological works that deals in any way with the nature and composition of these congenital liabilities. The fact is, so far as knowledge goes, they are non-existent; and they are only put forth to fill up a theory. (Hear, hear.) Let us look at it from this point of view. Here you have a small-pox disease outside the body, and you say it will do no harm in society if there is not this congenital liability within. How was it that nature provided in the healthy body this food for the small-pox disease? That is a very curious thing in nature—that the healthy body should provide special foods for these special diseases. (Hear, hear.) There is nothing like it in physiology or pathology. We are content to believe that if you are dealing with a healthy body and you come into relation with a specific poison, that it leaves an influence upon the natural tissues of the body and damages them. We do not need a specific condition with which to feed these special diseases; the natural condition of the body feeds them, and if they are weakly bodies, all the more so. But to invent, as they do, a "specific susceptibility," as Mr. Simon calls it, or a "congenital liability," as Dr. Carpenter calls it, is simply to beg the whole question upon this subject. We say that it is simply a myth. (Hear, hear.) "Congenital liability" is the Mrs. Harris of vaccination. (Laughter.) Now, in consequence of this theory—and this is the point I want to come at—the vaccinators are debarred from dealing with the sources of small-pox. (Hear, hear.) I was in the House of Commons the other night, and a question was put to Mr. Dodson by Mr. Grant to this effect—Would the Department encourage inquiry as to the causes of small-pox, and would they pay men who might make special researches in this direction? Mr. Dodson's answer was that he had no funds. Now, that was not a candid answer, because, when I look at this report issued by the medical officer of the Government for 1879, I find that Mr. Dodson has a staff of inspectors whom he sends round the country. If an epidemic of scarlet fever breaks out in the North, an inspector is sent to try and find out the cause. It may be traced to bad milk on a farm, or to filth, bad drainage or bad water, according to

the nature of the disease. But he does not send them after small-pox. Now, that is a very remarkable thing. Why does he not send an inspector to find out why is it that small-pox is being continually produced in the East-end of London? (Hear, hear.) Because that would be inconsistent with the vaccination dogma. (Hear, hear.) Both the *Times* and the medical journals are just now preaching the dogma referred to by the Chairman—"Never mind about small-pox; be vaccinated and you are safe." Now, that is a very dreadful doctrine to preach. If we are to have sanitary reform we must go to the *causes* of these things; and I hold it was not a fair answer on the part of Mr. Dodson to say he had no funds. If he has funds which enable him to send these inspectors up and down the country to search out the causes of scarlet fever, enteric fever, diphtheria and so forth, why should he say he has no funds to send them to find out the causes of small-pox? (Hear, hear.) When I look at this book further, I find that he can pay Professor Klein to make a research as to the relation of cow-pox and small-pox, to see whether they are really alike; that is to say, he can pay him to do something with respect to vaccination; but he cannot pay or send anyone to try and find out why small-pox arises in the East of London. We who are opposed to this vaccination are not merely wishful to put down vaccination, but we are wishful that the community should be set in the right direction for getting rid of small-pox. (Hear, hear.) Our position is not simply negative so far as regards small-pox, but positive—we wish to get rid of small-pox. Now Dr. Carpenter in his letter tells us that public feeling in London is tending against faith in vaccination. Well, I am sorry for the inhabitants of London on this ground—it is not the highest form of conviction to begin to disbelieve in vaccination because small-pox is prevalent. It would be far more rational if they disbelieved in vaccination because vaccination itself is an unwise thing. (Hear, hear.) At the same time they are but following the example of the profession in this respect. For eighty years in the last century the profession said that inoculation with small-pox was the right thing, and they only began to disbelieve in it when small-pox said, "I do not care for inoculation; I shall slaughter the people notwithstanding." And then they began to think that inoculation was not the right thing. The same with primary vaccination. They believed that primary vaccination was an absolute preventive of small-pox, and they only began to acknowledge it was not when small-pox said, "I shall attack the vaccinated"; and it was the same with respect to the transmission of other diseases by means of cow-pox—it was only when they could not deny that these other diseases were being transmitted that they would admit they could be. (Hear, hear.) That is not an intelligent mode of conviction, and that is what we complain of. They are now putting before us re-vaccination. What does it mean? That we are to try the experiment of re-vaccination until small-pox shall tell us that it does not care for re-vaccination. Now how many experiments of this kind are we to perform for them? (Hear, hear.) I say it is not an intelligent way of going about the matter. I hold it is our duty to direct the attention of the public and the Government to another view of the matter; and that just as it is the duty of the Government at the present time to search into the cause of epidemics of scarlet fever, and diphtheria, and enteric fever, so it is equally the duty of the Government to search into the causes of small-pox. (Applause.) I have told you that, so far as regards the "congenital liability" business, there is not a single fact in physiology to support the idea; but when we come to the remedies which we should suggest for small-pox, we can point to scientific experiment which tells in our favour. Take the experiments of Professor Pasteur and others. You know he has been dealing with malignant poisons in chickens. Professor Huxley said it was a poison analogous to the cow-pox, and so forth. But what are the results of Professor Pasteur's experiments? Just these—that the degree of malignancy of the poison was in inverse proportion to the time during which it had been exposed to the oxygen of the air—that the oxygen of the air killed the poison. And he drew a wise conclusion from it. He said—The cause of the cessation of epidemics was the oxygen of the air. (Hear, hear.) Now that is a rational conclusion. In London have you too much air, think you? (A laugh.) In a leading article in the *Times* the other day upon the day census you have been taking in the City it said, "So much of the area of the City has been given up to railways, stations, public edifices, new streets, and wide pavements, that people are now estimating the amount of space occupied by walls, chimney-stacks, and partitions as a sensible deduction, and asking how much breathing room is left for the average occupants of an acre. It is no longer space for movement that is in question, no longer light and air in the common sense, but a question of oxygen. The spaces actually occupied are beginning to be regarded with the same apprehensions as a crowded theatre or a lodging-house of the old St. Giles's class." And let me remind you of a fact which occurred in London last year; such a fact could not occur in the North of England. The instance is given in the *Times*. Their Royal Highnesses the Prince and Princess of Wales honoured the East-end by a visit. That was a great thing; we should think a great deal of such a visit in the North of England. Now, what was that visit for? It was to open a recreation ground. Well, that is a very fine thing in a district with a population of 93,000 people living in 13,000 houses, which means, at least, seven to each house. That is rather a crowded condition of things. Now, what do you think this recreation ground was in size and in nature? It was an acre in extent, and it was an old *burial ground!* (Laughter.) Fancy inviting their Royal Highnesses the Prince and Princess of Wales to open a recreation ground an acre in extent, for a population of 93,000 people, living seven in a house! What

an idea you Londoners must have of a recreation ground! In Dickens's tale of *Mugby Junction*, we read of an American who, when he had eaten of the food sold at the station, spat it out and said, "I larf." Now, if it were not a serious affair, I should laugh at the idea of inviting royalty to open a burial ground for the recreation of 93,000 people. The subject is a serious one. Does it not demonstrate the crowded condition of the people who live in the East-end? And when you take Professor Pasteur's experiments, which tell you how necessary atmospheric air is in order that these poisons may be killed, is it to be wondered that you are continually producing the small-pox disease in the East-end of London. (Hear, hear.) If you will impress this idea upon the minds of the people, instead of telling them to put disease into their bodies, you will be acting far more rationally than the vaccinators are acting. The fact is, the vaccinators appeal to the fears of the people, and not to their reason. (Hear, hear.) This idea about fresh air is not a new idea. I was reading the other day a novel of George Eliot's—*Adam Bede*—and came across small-pox in it. One of the finest characters George Eliot has drawn, is that of the Rev. Mr. Irwine. In a conversation with young Donnithorne, he says "that if you detect the disease at an early stage, and try change of air, there is every chance of complete escape, without any further development of symptoms." Now you know that George Eliot had special means for obtaining physiological knowledge. G. H. Lewes was a very eminent physiologist, and not what we call a "professional" one; and there is no doubt that George Eliot derived her idea from Lewes—that if you place small-pox patients in a pure atmosphere the chances are that the symptoms will disappear. Now that is common-sense supporting the scientific results of Professor Pasteur. (Applause.) I hold it is our duty to place before the community these rational views in opposition to those panic-stricken views connected with vaccination. (Hear, hear.) There is just one other point I should like to refer to, and that is with respect to Dr. Carpenter's want of candour in his letter to the *Spectator*. In dealing with hospital mortality, and pointing out that the mortality was greater amongst the unvaccinated, he makes this remark—"the other conditions were identical." That is to say the only difference between the two classes was that the one class was vaccinated, and the other was not. Now I say that was not candid on the part of Dr. Carpenter, because I must not charge Dr. Carpenter with being ignorant; but I do say there is a want of candour about his deliberate statement that the other conditions, except those of vaccination, were "identical" in those two classes. Now what are the facts? Dr. Carpenter knows perfectly well that the first and main instruction to public vaccinators by the Government is—"vaccinate only subjects who are in good health." There at once the practice of vaccination divides the population into two sections, healthy children on the one hand, unhealthy on the other. And Dr. Stevens adds to the latter class the gutter children, who can never be got at, the lost waifs and strays of society. Here you have these two classes, the healthy on the one hand, and the unhealthy and the lost on the other, and is it fair for Dr. Carpenter to say that the conditions of these classes are "identical," except in the matter of vaccination? (Hear, hear.) Surely it is not a fair statement. Now if small-pox comes amongst these two classes of people, which class ought to suffer most? Really to put the question is to answer it. I say that the unhealthy and those that have not been vaccinated are the people who ought to suffer most. But I do not put my own word before that of the Parliamentary Committee of 1871. Mr. Simon put it very strongly. Why is it they do not vaccinate the unhealthy? Because they dare not. They are afraid they would kill them in the vaccination, or that there would be some dreadful result for which they would not like to be responsible. What did Mr. Simon say before the Committee? He said, "But let it be considered, with particular reference to that child who so shows a special liability to be upset by vaccination, what an *infinitely greater upset small-pox would be.* If the minimised disturbance, if the *minimised small-pox, which vaccination is*, produces this temporary derangement of health, *what would not natural small-pox do to the child?*" (3098). That is precisely what we say is the reason why there is a higher mortality amongst the unvaccinated, because they are weakly children, and not calculated to withstand small-pox to the same degree as the other class. Well now I think it is our duty to put these facts before the people, and show them that it is not a question whether you are vaccinated or not, but whether you are healthy to begin with, and are living under healthy conditions. (Hear, hear.) The *Lancet* the other week said it did not matter about the discussion of this question because the profession had already formulated its opinion upon the question, but it forgot to give us the formula. That is a remarkable omission, because it at once reminds us that here is Dr. Carpenter saying that small-pox and cow-pox are identical, and here is Dr. Cameron saying that they ought not to be identical—Which is the correct formula? The fact is the members of the profession differ essentially upon vaccination. (Hear, hear.) I wish success to the cause you have in hand; but you must remember that you will not win except by bringing outside pressure to bear upon Parliament. I do not envy Mr. Dodson's position—I am doubtful whether he is quite strong enough for the place. But this is to be said for him—there is no other department of the Government that has so many well-paid officials whose position depends absolutely upon this vaccination dogma being held to be correct. (Hear, hear.) Mr. Dodson lives in a vaccination atmosphere. As to other sanitary measures, why there is scarcely anything being done by the department. It is all vaccination from one end of the country to the other. They have a system of bribery, as you know. Assuming that their doctrine is true, namely, that vacci-

nation must be efficiently performed, they dare not trust to their public vaccinators to do what is right; they have to tempt them to do it by doubling their fees. Now, that is really a strong condemnation of the system. Whilst I doubt whether Mr. Dodson is strong enough for his place, he has this excuse—that he is surrounded and advised by well-paid officers whose position absolutely depends upon vaccination being kept intact. (Applause.)

Mr. ALEXANDER WHEELER—I do not know what you will say to a fresh speaker at this late hour of the night. It seems to me that enough has been said. The ground has been pretty well covered. By way of variety Mr. Wheeler related an anecdote respecting Dr. Carpenter, to whom he paid a high compliment. The point of the story was that Dr. Carpenter was not above confessing himself to be in the wrong when he was shown to be so; hence Mr. Wheeler hoped that Dr. Carpenter would yet live to confess that he had been in the wrong on the vaccination question. The greatest minds were always those who were the most ready to acknowledge their errors. Mr. Wheeler then turned to an examination of the small-pox hospital reports, upon which Dr. Carpenter said the decision on this question must rest. Mr. Wheeler first imagined a person to be visiting one of the small-pox hospitals in London. What would he see in the reception room? Why, patient after patient examined as to marks on the arm, and registered as "vaccinated." There were at least three registered as vaccinated to one unvaccinated, and the latter was generally a bad case where the marks would not be visible, even if there. Going back to the year 1650, long before Jenner was thought of, he found that persons suffering from small-pox without complication of the disorder were almost certain to recover. That was the kind, it had been said, that "the nurse cannot kill," so easy was it to cure. It was exactly the same to-day. Amongst the severer cases, where the pustules run together, "confluent" small-pox, the mortality was considerable, often one half. It was the same in 1650. Dr. Sydenham's treatment for this kind was followed to-day. The type of disease, the mortality and the treatment were unaltered. There was another and worse kind of small-pox, in which the great vital organs were affected, the lungs, the heart, etc. This was very malignant. Dr. Sydenham noticed this malignant kind in the years following the plague, and he says that very few recovered. It was so in the hospitals to-day. The hospital records to-day show in some cases that the bulk of these malignant cases were of vaccinated persons. Mr. Wheeler next called attention to Mr. Marson's theory of "good marks," which was made much of some years ago until the theory was exploded. Nothing was said now about "good marks," because in the hospitals at Homerton and others he found no fewer than 3,959 cases with "good marks." Was not that sufficient to settle the question of "good marks"? It showed that this theory was completely false. In the Homerton and other hospitals he found 133 cases of malignant small-pox in vaccinated persons—the very worst type of the disease in those who had been "protected" by vaccination! Another proof of the utter falsity of the protective theory. In one of the hospitals only two of these cases were unvaccinated. Further, no fewer than 35 of the malignant cases bore "good marks," and yet they nearly all died. At Homerton all these vaccinated malignant cases died, at Hampstead 99 per cent. died, at Fulham 16 out of 22, and in another hospital all the cases were fatal. It was just the same now as in the time of Sydenham. You cannot possibly, continued Mr. Wheeler, by any form of vaccination alter the character of the disease; vaccinate as you will, by whatsoever kind of "lymph," by whatever number of marks, by whatever "quality" of marks, or of virus, the disease is unaltered, the character of it is unaltered; you cannot alter it by "good marks;" you cannot alter it by any amount of vaccination. We have had vaccination enough in the last few years; from 1852 to 1877 no fewer than fourteen millions and a quarter of people have been vaccinated in this country! And then they say they are not safe, because of the few who remain unvaccinated. (Laughter.) Yet when we go to the hospitals we find vaccinated people dying of the most malignant form of small-pox. When the theory of "good marks" died out, then they set up the theory that all depended on the quality of the marks; they were to be well foveated, very deep, like a thimble top in appearance, with a variety of like descriptions without the complete fulfilment of which there could not be success. These have also failed to protect, and now they tell you they want re-vaccination made compulsory! Dr. Gayton in his report actually says—"I suppose no one is prepared to say that primary vaccination is an absolute prevention of small-pox;" and that man has had as much experience as any doctor in London. They say you must be re-vaccinated, yet I have found no fewer than 3000 cases of re-vaccinated small-pox, the bulk of them being in the French and German armies. I will, however, refer to the cases I find in the hospital reports, which are full of laudation of re-vaccination, while affording proof of its inutility and ground for its condemnation. In but a few of these small-pox hospital reports, I find no fewer than 59 re-vaccinated cases, some of them fatal! Now I have gone the whole round of these absurd and baseless theories. Is there any other theory left? Is there any man bold enough to start another theory? There is no end to theories when there is something "substantial" behind them; and I cannot help feeling that it is the enormous interest these people have behind them which keeps them chained and bound to this superstition. (Hear, hear.) The farmers did not go with Bright and Cobden for the repeal of the corn-laws! Can you expect people to go against those interests which they know help to fill their purse? It is not to be expected; therefore I do not complain that medical men do not side with us. But they will soon side with us. We have several medical men here, and as the chairman said, very few medical men know anything about vaccination, but when they examine they will come over. We must rouse the people of this country to get rid of the superstition. (Applause.) Humanity has never had a call to a holier crusade. I have often seen poor children dying a lingering death and covered with disease from this pollution. When the parents of these suffering children are taken before the magistrates, and refuse to sacrifice another of their children to this abominable Moloch, what does the magistrate say? "It is the law." Well, then, we must go behind the magistrate and repeal the law. (Applause.)

Mr. W. J. COLLINS, B.Sc., M.R.C.S., drew attention to the "dangers of vaccination." If vaccination were a matter of no concern, its enforcement might, perhaps, be tolerated; but if, on the other hand, as was alleged, vaccination was by no means a harmless affair, but was fraught with danger to life and health, and was the means of conveying horrible diseases from child to child, to enforce it under such circumstances was tyrannical.

Ever since the days of Jenner the feeling had prevailed amongst the thinking part of the medical profession that the inoculation of an animal poison, such as cow-pox, into the human system, might not improbably be the means of conveying or intensifying or occasioning one or more of the so-called inoculable diseases. That opinion had steadily grown from that day to this, and the facts were now too strong either to be explained away or denied. The medical profession had been compelled most reluctantly to recant, and public faith in vaccination was shaken, and refused to be reassured by any number of official explanations. (Hear, hear.) Syphilis, erysipelas, pyæmia, skin diseases, scrofula, and mesenteric disease, were long ago specified by anti-vaccinators as being likely, from their nature, to be communicated in this manner. Individual experience and pathological experiments fully corroborated these opinions. Only one thing was wanted to complete the chain of evidence, and that was an appeal to statistics. This was now forthcoming in Mr. Hopwood's Parliamentary Returns. These Returns confirm in the most distinct and startling manner the suspicions with regard to the dangers of vaccination, for they demonstrate beyond the shadow of a doubt that each and all of the inoculable diseases of childhood have increased concomitantly and coincidently with the increased vaccination brought about by the compulsory law. (Hear, hear.) Mr. Collins proceeded to give examples. When vaccination was voluntary the number of deaths of children under one year from skin diseases was 183 per million births. When vaccination became compulsory—but not regularly enforced—the number rose to 253. Under enforced vaccination the deaths further rose to 343; that is to say, 160 more children, out of every million, died from skin diseases under compulsory vaccination than when it was purely voluntary; in other words, 160 children out of every million died from skin diseases caused by vaccination before they reached one year of age. (Hear, hear.) Other diseases had increased similarly. Syphilis had increased four-fold; erysipelas from 817 to 834; scrofula had trebled. It was remarkable that the death-rate from all other diseases had uniformly declined, thanks to sanitary legislation, and this rendered still more prominent the uniform increase in fatality of those diseases which were liable to be communicated by vaccination. (Hear, hear.) You may ask, continued Mr. Collins, What has the medical profession to say to these facts and figures? They are unable to explain away or deny them; but, nevertheless, are unwilling to relinquish vaccination. Thus it is that an artificial agitation has been raked up by Mr. Ernest Hart and others in favour of calf-lymph. Now, calf-lymph is a delusion and a snare. Calf-lymph is a name applied indifferently to at least three totally different commodities possessed of entirely different properties. First, there is the lymph obtained by inoculating the calf with the ordinary humanised lymph. That only seems to add the chances of communicating bovine disease without removing human impurities. Secondly, there is the lymph obtained by inoculating the cow with human small-pox. That is Mr. Ceely's plan. That never produces cow-pox, when it produces anything it is true small-pox, and is capable of spreading that disease by contagion. Lastly, there is the lymph obtained from *spontaneous* cow-pox. This is the fashionable lymph now being extensively advertised; and this is the lymph which Jenner himself denounced as utterly unprotective. (Hear, hear, and Laughter.) Hence the dilemma in which the medical profession and the Local Government Board are in with regard to calf lymph and its adoption. Such are the facts respecting the transmission of disease by vaccination and the now famous calf lymph. What, on the other hand, has vaccination to offer us in the way of advantages? Truly, at the best, these are but vague, equivocal, and in the words of Dr. Cameron, "mythical;" and

> Who would run that's moderately wise
> A certain danger for a doubtful prize?

One thing is certain—vaccination either protects from small-pox, or it does not. If it protect, compulsion is unnecessary; if it do not protect, compulsion is intolerable. (Applause.)

Dr. NICHOLS said we must not expect much from the medical profession, because its organisation and the fashions and customs in regard to it have made it the interest of the profession that disease should prevail and abound. It is not the interest of physicians to prevent disease; they are not paid to prevent it except in the case of health officers. If it were the interest of physicians to prevent disease—if they were paid to teach the people the laws of health—we never should have had any of this trouble about vaccination. Then there were some superstitions on the part of the English public. People believed in the infallibility of doctors, who had for centuries led the people by the nose in various directions, sometimes one way, sometimes another. The doctors continually change, but the people follow them all the same. You must get over that, said Dr. Nichols; and there is another superstition you must get rid of, and that is in regard to Acts of Parliament. An Act of Parliament is not infallible. The progress of all liberty in the world has been through opposition to law, opposition to things established. Eternal vigilance is the price of liberty, and your vigilance was never more needed than it is at the present time. (Hear, hear.) Here is a law which has been shown by statistics to have murdered thousands of little children in this country. I have seen examples of its murderous work. I have seen many persons who have been undoubtedly diseased, some who have died in infancy, and others who have borne life-long suffering, and I could trace no cause for this but vaccination. The parents of these children and their surroundings were healthy, but disease had been implanted artificially in the system. Well, we have got to get rid of this tyranny in some way. Men will not suffer it much longer; or if men will, women will not. (Hear, hear.) It is a woman's question, and above all, a mother's question. (Hear, hear.) And the mothers of England, especially in the humbler class of life, are being aroused in regard to this evil, and they are stirring up their husbands, I am glad to see. Already we have had some anti-vaccination riots, riots at Brighton, and in the Midlands. I wish we could have a great many more. You have read in the papers that there was a rumour the Government was going to send doctors to vaccinate the children in the public schools, and the parents gathered and clamoured against it, and took their children home that they might escape this curse. (Hear, hear.) If you could have that all over England, then the newspapers would be open to us; they would begin to discuss the question, it would be talked about in Parliament, and we should not have to wait very long to bring the matter to a crisis. (Hear, hear.) Gentlemen, that is what you will have to do in some such way; a little Boycotting, if you please; a little rioting in an innocent sort of way; clamour enough to be heard. I don't want anybody to be hurt; no blowing up, but clamour enough to make yourselves heard; enough gathering to-

gether to make yourselves visible; and enough speaking and petitioning and protesting to make headway against this abomination. (Applause.) It has been my plan for many years to work for the prevention rather than the cure of disease. Small-pox and similar diseases are caused by impure atmospheric and other conditions, which poison the blood. These diseases can be prevented by means that are well-known to every person who knows the elements of sanitary science; therefore, there is no need of all this stuff, and worse than nonsense, about the matter. Vaccination is not necessary, even if it were ever so good; even if all that is claimed for it were true, there would be no necessity for it. Place people in right conditions, and teach them how to live; let them eat, and drink, and breathe, as they ought to do, and keep themselves and their surroundings clean, and there will be none of these diseases. (Hear, hear.) I hope we shall use our exertions in every way, even if we do make a small riot, to have this abominable law repealed. An Englishman's house is said to be his castle. It is his castle no longer. The vaccinators not only come into his house, but they get inside of his skin, and invade his veins, so that the blood in his body is not his own. Men claim a prescriptive right to poison it. Then look at the cowardliness and unfairness of the vaccination law which attacks little children, spares adults, and compels the poor, but does not compel the rich. (Hear, hear.) That inequality at least ought to be swept away. Let them do one thing or the other; let them vaccinate everybody, rich and poor, high and low, young and old, or let everybody do just as they please about vaccination. (Applause.)

Dr. EDWARD HAUGHTON said he had listened with great satisfaction to the previous speeches, and had never heard the case against vaccination put in a more unanswerable way. Almost every point had been touched. Dr. Haughton said he had been connected with this movement for about twenty years, and he had learned to think charitably towards the members of his profession because of the difficulties they encountered in arriving at the truth. Dr. Carpenter was personally, and by the traditions of his family, a friend of liberty, civil and religious, and if we could once convince his understanding he would be with us heart and soul. He (Dr. Haughton) called upon the editor of the *Spectator*, and he positively declined to allow any reply to Dr. Carpenter's letter from a set of men who, he said, wanted to make out that two and two made five. (Laughter.) Dr. Haughton thought it was rather the pro-vaccinators who were puzzled in their arithmetic. He then referred to the contemptible publication called "Facts Concerning Vaccination," issued under the patronage of the Local Government Board and the National Health Society, to which no individual had dared to put his name. It stated that "the fear that a foul disease may be implanted by vaccination is unfounded," when there was a blue book full of evidence to the contrary. Again, "The alleged injury arising from vaccination is disproved by all medical experience." A more impudent statement was never made; and this was paid for out of the poor-rates that money might flow into the pockets of the public vaccinators. He objected to money raised for the poor being used for experimental [illegible]. He objected further to a bribery fund [illegible] disposal of the Privy Council, and of which no return was made to Parliament. (Hear, hear.) Dr. Haughton said he would give an instance in which this vaccination fraud had been exposed in connection with the department in Dublin. It was proposed to obtain some calf lymph for the purpose of vaccinating the people in Galway; and some benevolent guardian offered a calf for the purpose, that it might be inoculated with variolous matter, as recommended by Sir Thomas Watson. What was the official reply? The thing was forbidden because it would be a "fertile source" of communicating the small-pox disease, and would "render the operation liable to prosecution." This had never been confessed by the Local Government Board in London. It was an instance of "Home Rule"—(Laughter)—and he ventured to say that in this instance the Home Rulers had the best of it. In Ireland the people were finding out that this thing was a humbug. Dr. Haughton complained of the unfairness of the Press, and predicted that in less than five years we should see the total abolition of the Compulsory Vaccination Acts. (Applause.)

Mr. THOMAS BAKER, who was the last speaker, referred to a lecture by Mr. Michael, Q.C., in which the aid of the policeman was desired for the enforcement of vaccination. He found, on writing to Mr. Michael, that he was ignorant of Mr. Hopwood's Return. J. S. Mill said:—"He who knows only his own side of the case, knows little of that." Mr. Michael had evidently been primed by some doctor. Mr. Baker repudiated any intention of charging the medical profession with mercenary motives in upholding vaccination. They had been educated in the belief that vaccination was true, and even if they desired to study the question they were not allowed the opportunity. It was pitiful to see a noble profession ignobly led by a few medical experts. Much had been made of the exemption of Post-office employés from small-pox. Mr. Baker said he could match that. The Metropolitan Association for Improving the Dwellings of the Industrial Classes with a tenantry of 6000 persons, had not had a single case of small-pox in the last ten years. He was surprised that any editor could be so idiotic as to give vaccination the credit of exemption from small-pox. He did not charge the medical profession with dishonesty in this matter, but only with ignorance. Medical men were as ignorant on the subject as other portions of the community, and they did not like to risk their bread and butter. Mr. Dodson was a mere puppet in the hands of his officials, who put into his mouth positive falsehoods. Mr. Dodson bragged that he had been vaccinated three times. That fact alone ought to have disqualified Mr. Dodson from holding office, because he could hardly be expected to see fair play between the officials and the public. What language could be too strong against those who misused the public money, reiterated fallacious statements, refused inquiry, and suppressed every kind of information? For such conduct no contempt could be too deep, and he would put into every suffering mother's hand "a whip to lash the rascals naked through the world."

Mr. YOUNG announced that he could be found any day at the office of the Society, 114 Victoria Street, Westminster, from 12 to 4. Having been summoned thirteen times, he would be able to give advice to those who were persecuted, and frequently to indicate means of resistance and escape with which his experience of the law had made him familiar.

The CHAIRMAN said that while on the one hand the cry was "Vaccinate, vaccinate, vaccinate," the cry on our side must be "Agitate, agitate, agitate," (Applause.)

The proposal of thanks to Mr. Taylor, M.P., and

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the Rev. Dr. Seddon, for presiding, was carried by acclamation.

Extracts from letters read by the Secretary.

From Dr. HUBERT BÖENS, Charleroi.

I send greetings with all my heart to your honourable assembly, the members of which have contended for years against the abominable system of vaccination—a fiction in the name of science which has diffused nothing but evil and disaster.

Even if the memory of the introducer of vaccination were entitled to respect, the vaccinators of our day have no claim to the like privilege. They must know that by vaccination they do not avert small-pox, whilst they injure the health of children without any compensation whatever. Facts and figures are overwhelming in our favour. The reign of compulsory vaccination is nearly over. The Latin people will no longer submit to the tyrannical law, and the English, the Germans, and the Slavs will not be imposed on longer.

From Mr. R. A. MILNER, Keighley.

If possible it would have given me the greatest pleasure to attend your Annual Meeting. I hope you may arouse poxy London to follow the example of Keighley which has only 12½ per cent. of its children vaccinated, and yet has not had a single case of small-pox since 1875. The mandamus has not secured the vaccination of a single child through prosecution. We are still a majority on the Board of Guardians, but have little else to do than watch the enemy at a distance.

From JOHN FONDEY, M.D., Philadelphia.

It would afford me much pleasure to be with you, but I must content myself with expressing by letter the sympathy I feel with you in your battle against the hydra-headed monster—Vaccination. The cause in which you are engaged is a grand one. The foe is a detestable monster, a scourge to mankind, and a damning disgrace to that profession which boasts of its intelligence, philanthropy, and usefulness to the race. Our American forefathers felt their cause to be a just and holy one when they took up arms to resist oppression in the form of taxation without representation. It was a principle for which they contended connected with dollars and cents; but the battle you are waging is one which has regard not only to the right to liberty of person and action, but also to the right to keep the bodies of ourselves and offspring pure and free from defilement—to preserve uncontaminated that fountain from which the organism derives its life, nutrition, and vigour. To pollute that fountain; to impart disease, and this often of the vilest character; and to taint the blood of infants, who have no voice in the matter, is a wrong of the most heinous character, for which all who are concerned must give account at the bar of God.

From CAROLINE H. SPEAR, M.D., Philadelphia.

When the public mind is agitated concerning a matter, its condition is hopeful. Indifference is the state most to be feared. As in England, so in the United States, the outlook is encouraging; for the people are thinking and talking of the iniquitous system that would make disease universal in order to guard against a possible emergency; and talking, as Wendell Phillips has said, is the background of action.

PROPOSED DEPUTATION TO MR. DODSON.

Considering it would be well to have an interview with the President of the Local Government Board when so many of our country friends were in London, an appointment was solicited and declined in the following terms—

LOCAL GOVERNMENT BOARD,
WHITEHALL, *5th May*, 1881.

Sir,—Mr. Dodson has received your letter of yesterday's date, requesting him to receive a deputation of delegates from the various Anti-compulsory Vaccination Leagues and Societies with regard to the operation of the Vaccination Acts, and he desires me to say that his time at present is very fully occupied, and that as the Government have announced their intention of not dealing with the Vaccination Acts this session, he feels that would be giving the deputation unnecessary trouble if he were at present to fix a time for such an interview as is proposed. I am, Sir, your obedient servant,

HUGH F. SEYMOUR.

WM. YOUNG, ESQ.

KEIGHLEY.—In the election for members to serve as Guardians, the anti-vaccinators have achieved a decided success in Keighley parish. They have carried all their men—Thompson, Butterfield, Leach, Almond, Milner and Snowden.—*Keighley News*, 16th April.

THE NURSE FABLE.—As to the statement in the *Times*, that "the nurses of the Small-Pox Hospitals are all re-vaccinated before they enter upon their duties, and all escape small-pox," you will see in the *Times* of 8th November, 1879, a letter from Mr. Jebb, Clerk to the Metropolitan Asylums Board, admitting that the immunity of the nurses and servants in these hospitals is *not* absolute, and that *all* had *not* been re-vaccinated before entering upon their duties.—D.

HOW MERCURY WAS BELIEVED IN.—M.R.C.S. writing to the *Brighton Herald* of 16th April observes:—"I will simply say that I do not believe that one case of small-pox was ever yet prevented by vaccination, though I am of the strong belief that many a child's blood has been polluted and poisoned thereby. The fallacies of the faculty are as great in this as in many other cases. I will just mention one that presented itself strongly to my mind even when I was a student, but in a still more marked manner when I went to India, in the Hon. East India Company's service, upwards of forty years ago, viz., the indiscriminate administration of mercury for complaints generally, but more especially for diseases of the liver. When discussing the matter with Indian medical men old enough to be my father, and venturing to hold a different opinion, I have been told, 'You will find nothing will act upon the liver but mercury; it is indispensable in all hepatic diseases.' This was the opinion of medical men generally both at home and abroad; but I am happy to say since that time the question as to 'Whether mercury did or did not increase the biliary secretion?' was submitted to a committee of members of the British Medical Association; and their decision was, that 'in whatever manner, dose, or form it may be administered, it has not the slightest influence in increasing the flow of bile from the liver,' That it poisons the blood, as vaccination does, is the firm belief of M.R.C.S. and L.S.A."

MR. SHELDON AMOS AGAINST COMPULSION.

In the *Beehive* of 21st November, 1874, Mr. Amos replied as follows to Mr. Crompton, who had attacked Mr. Bright for his condemnation of the Compulsory Vaccination Acts—

"My purpose is to defend the position of Mr. Bright against an attack which is made in a spirit wholly alien to Mr. Crompton's truly generous and liberal temper, and which I believe nothing could have given rise to but a lurking fear that, inasmuch as the Compulsory Vaccination Acts could not survive by their inherent reasonableness and justice, they must be bolstered up by clamour and contemptuous invective. Despotism is usually violent in proportion to its conscious weakness.

"The reasons why I hold that vaccination (even if it be a tolerably effectual preventive in most cases, which is the utmost that, in the face of glaring facts, can be claimed for it) should not be made compulsory, may be briefly stated as follows—

"1. A system which is intended to reach every child that is born cannot, by any amount of legal precaution, be carried into effect without operating harshly, cruelly, and dangerously in too many individual instances to be left out of account.

"2. The system engenders an army of doctors directly interested in performing the operation as expeditiously, and, therefore, as indiscriminately, as possible. No imaginable check can be devised to counteract this.

"3. All discretion is taken away from a poor though intelligent parent as to what doctor to employ, or as to whether to employ a 'duly qualified practitioner' at all. There is no possible legal provision that can be made sufficient to cover the proper claims of parental discretion in so vital a matter.

"4. It is in the highest degree impolitic to incorporate a medical provision against a special and no doubt transient form of disease among the fixed institutions of the country. Among other mischievous results, it diverts attention away from the true causes of all disease, and must tend indirectly to make all the medical staff who derive emolument under the Acts (to say the least of it) indifferent or not sanguine as to a time arriving when they can be dispensed with.

"5. The same argument may be used as was used by Dr. Congreve in the case of compulsory education; that the full influences of voluntary efforts to extend the practice of vaccination has never been tested, and that compulsion, which is obviously in itself an evil, should only be resorted to (if ever) as a last and desperate remedy.

"6. There is this difference between compulsory vaccination and compulsory education, that it may be presumed that the latter only presses in the first generation in which it is resorted to, and then only in exceptional cases, while the former (vaccination by the public vaccinator) presses hardly in all cases, and will be felt to be just as great and non-natural a burden in all coming generations as in the present one.

"These are some reasons against compulsory vaccination which I hold are at once independent of all facts relating to the value of vaccination in itself, and quite consistent with a belief in its general medical efficacy.

"SHELDON AMOS.

"9 King's Bench Walk, Temple."

FIGHTING IN THE TRANSVAAL.—No doubt it told for something in favour of the Boers that our young soldiers were sickly and out-of-sorts with their recent re-vaccination.

MR. CANDLISH, M.P. for Sunderland, who was the first witness examined by the Vaccination Committee, said—"No House of Commons would dare to pass a law to take children by violence from their parents and vaccinate them. If vaccination be a protection, the unvaccinated can do no harm; if it be not a protection, it is wrong to enforce it. There is a conscience at work in resistance to this law in the case of a large number of intelligent and respectable persons."

SMALL-POX AMONG SAILORS.—The outbreaks of small-pox among ships' crews used to be almost as frequent and as much dreaded as scurvy; and the occurrence of the disease was in nowise difficult to account for when we consider the horrible crowding and neglect of ventilation that used to prevail. We read that JOHNSON once observed, "As to the sailor, when you look down from the quarter-deck to the space below, you see the utmost extremity of human misery; such crowding, such filth, such stench!" BOSWELL—"Yet sailors are happy." JOHNSON—"They are happy as brutes are happy, with a piece of fresh meat—with the grossest sensuality." SCOTT—"We find people fond of being sailors." JOHNSON—"I cannot account for that, any more than I can account for other strange perversions of imagination."

MR. ABEL'S CASE.—In the House of Commons on 28th April, Mr. P. A. Taylor asked the President of the Local Government Board whether it was true that Mr. Joseph Abel of Faringdon, had been prosecuted thirty-four times for refusing to have his children vaccinated; and whether he proposed to bring in any measure to limit the amount of punishment inflicted for non-compliance with the Vaccination Acts. Mr. Dodson said he believed the statement was correct, but the Local Government Board *were not responsible for these repeated prosecutions.* They had in more than one circular advised Boards of Guardians *to act with caution and moderation.* As to the last part of the question, looking to the scant encouragement which was given last year to his Bill, limiting the number of prosecutions, he was not prepared to bring in another Bill this year.—It is true that the Local Government Board have issued one or two circulars dissuading Guardians from over-much persecution of steadfast anti-vaccinators; but the advice has been so overloaded with qualifications that dull fellows, like those at Faringdon, can scarcely recognise what is intended. As for Mr. Dodson's assertion that his Bill to limit penalties received scant encouragement, he never gave the House of Commons an opportunity to pronounce judgment upon it, but weakly withdrew it in consequence of the clamour and threats of the medical unionists. Mr. Dodson, we daresay, means well, but he has not the backbone that is the first condition of a statesman.

LETTER FROM MR. JOHN SAVAGE.

MR. SAVAGE has undergone a persecution for resistance to vaccination of singular vindictiveness, and in the following letter he proves with what good reason he has resisted the law—

KINSALE, 14*th April*, 1881.

Dear Sir,—Hearing that a child of Maurice Walsh was dead from vaccination, I thought I would go and see if the report was true. I drove out to Thomastown, Belgooly, and, alas! the story was too true.

On entering the house I saw the little corpse on a bed, and the father and mother weeping at the bedside. A little coffin at the foot of the bed awaited the babe that had fallen a victim to the State-licensed manslaughter. I asked the affiicted parents the following questions:—

What age was the child?—Eight months.

What age when vaccinated?—Three months.

How long after did the illness occur?—Three weeks.

The arm appeared to get well, but immediately afterwards the body swelled and a rash came out, then the body got all lumps. The lumps from the body to the knees then became holes that a person could put the top of a finger in, the holes all running, and no one could stand the smell. I asked was the child in good health when vaccinated; the mother said, "Quite well," and that Dr. Dorman, Kinsale Dispensary, praised the healthy appearance of the child when being vaccinated.

It was suffering in the agony I have stated for four months when the Lord released it, 24th March, 1881.

JOHN SAVAGE.

THE SOMERVILLE CLUB.—It has been arranged to have a Discussion on Vaccination at this Club, 21 Mortimer Street, Cavendish Square, on Tuesday Evening, 21st June, at Eight o'clock. Dr. Edward Haughton, it is intended, will lead off the debate.

WHAT IS POSSIBLE.—In the Annual Report of the Wanstead Orphan Asylum for 1880, we read,—"During the year only two deaths occurred among 600 children." Of course it will be said they were saved from small-pox by vaccination, but what saved them from kindred forms of zymotic disease?

GIANT HOSPITALS.—In a notice in the *Lancet* of the death of Mr. Francis Godrich, M.R.C.S. at the age of 85, we read—"He was an earnest and persistent opponent of the Fulham Small-pox Hospital; holding the opinion that it was a centre of infection to the surrounding districts. His experience as Medical Officer to the Brompton District, adjacent to the Hospital, led him to the decided opinion that the aggregation of large numbers of cases intensified and extended the area of infecting power to a far greater extent than is at present generally supposed.

HALIFAX NURSES AND STATISTICS.—In the *British Medical Journal* of 7th May there is a letter from Dr. Dolan of Halifax in which he reports that "a housemaid, a nurse, and to make matters worse, the matron of the Borough Hospital are down with small-pox." The Doctor concludes his letter with an amusing specimen of medical statistics. Having described a former epidemic of small-pox in which he had 115 patients under treatment, he says, "My mortality was 5 deaths in the proportion of 3 per cent. vaccinated, and 32 per cent. unvaccinated." Query—How are these per centages extracted from a mortality of 5? Can it be that 1 of 3 unvaccinated died, and 4 of 112 vaccinated? Even thus the figures are incorrect. If 1 of 2 unvaccinated had died, we presume the mortality would have been set down as 50 per cent!

WHAT DID JENNER DISCOVER?

I NOTICE a paragraph in a recent *Inquirer* headed with this query, which also occurred to my brother. His reference to a patent had, however, a double meaning, because Simon had tried to disparage the anti-vaccinators as having among them a vendor of *patent* medicines.

GEORGE S. GIBBS.

Mr. R. B. GIBBS before Select Committee on the Vaccination Laws in 1871.

2821. Mr. MUNTZ.—Seventy-six years is a long time for experiment, is it not?—Exactly; and I maintain that the faculty ought to have come to a settlement before this.

2822. I presume that you wish to show the Committee that there were differences of opinion in 1807?—I am going to show that in 1802 the Committee of the House of Commons reported in favour of Dr. Jenner's discovery on the faith of a report of the College of Physicians, that vaccination was infallible as a preventive of small-pox; and after that to show, in the words of Mr. Lefevre that the matter of that report was unfounded.

2823. Some members in the House of Commons did not concur in the conclusion at which the House arrived; is that the evidence which you wish to give?—Yes.

2824. What do you wish to add to that?—I want to show that the College of Physicians made a mistake.

2825. Supposing that you proved that there were twenty gentlemen in the House of Commons who did not approve of the grant to Dr. Jenner, what has that to do with the present inquiry?—It tends to show that instead of being a matter for which Jenner might have taken out a patent as a perfect discovery, it was a matter of experiment, and is still a matter of experiment.

INFANTS IN WORKHOUSES.—Mr. C. H. Hopwood having pressed Mr. Dodson in the House of Commons on 12th May as to the legality of vaccinating infants in workhouses immediately after birth, Mr. Dodson replied that in his opinion vaccination could not be enforced if the mother objected.

THE TYRANNY OF THE WELL-MEANING.—There are not wanting theorists and politicians among ourselves who would, if they could, force upon a reluctant people blessings which they do not desire, but which their respective benefactors think they ought to possess.—SIR RUTHERFORD ALCOCK on Japan in *Academy*, 30th May, 1874.

WHY PERPLEXED?—In the *Lancet* of 14th May a case of concurrent variola and vaccinia is reported "as curious, not to say rather startling. O. H., a strong, healthy young man of twenty, working in a small-pox infected district, was vaccinated on 26th April. All the signs of successful vaccination were developed. On 5th May the eruption of small-pox appeared, and he now lies under my care with a severe confluent attack. Presumably the inoculation of small-pox began prior to his vaccination, but is it not singular that the inoculation of the one and the course of the other should have been concurrent, and equally strange that the most severe form of the disease should have manifested itself? Or is there anything in the theory of worn-out lymph being capable of producing outward signs alone? IN PERPLEXITY."—[The probability is that the vaccination induced the variolation. Ceely's lymph would do it.]

PROSECUTION OF MR. THOMAS BURT, M.P.

At the Newcastle Police Court on 29th April, Mr. Thomas Burt, M.P. for Morpeth, was summoned for non-compliance with the Vaccination Act. Mr. Burt was not present, but Mrs. Burt appeared in the dock with the child in her arms, and was accompanied by Mr. John Nixon, secretary of the Northumberland Miners' Association. Mr. Leech, the vaccination officer, said the notice required was served on the 24th of March. So far as he was aware the child was in an unfit state to be vaccinated, and it had been so certified from time to time. The reason he had now summoned Mr. Burt was that he refused to supply a certificate of its continued unfitness. Alderman Gregson said that Mr. Burt must be informed that the law of the land was definite and precise on the question that all children must be vaccinated. The present child had not been vaccinated, and as they had no certificate of unfitness before them they had no option but to make an order that the child be vaccinated within a month.

The following letter was addressed by Mr. Burt to Alderman Gregson—

House of Commons, April 27, 1881.

Dear Sir, - I duly received the summons to appear at the Newcastle Police Court on Friday next, 29th inst., for having omitted to have my child, Wilfrid Burt, vaccinated. By mistake I attended on Friday last. I regret that business in London will not allow me to be present on the 29th. Perhaps you will accept my assurance that my absence is not due to any want of respect for you and the bench of magistrates. It would, of course, be highly improper on my part to enter into any general argument on the subject of vaccination, since the magistrates have to administer the law and not to argue about it. I may, however, be allowed to say that nothing but strong and conscientious objections to vaccination would have induced me to disobey the law. I really believe that vaccination is fraught with great danger. High medical authorities are of that opinion, and statistics prove that foul diseases are frequently transmitted by the operation. I was a short time ago in conversation with a medical gentleman, who has been a public vaccinator for many years, and he informed me that he knew he had caused the deaths of many children by vaccination. He declared that he defied any one, however careful he might be, to always distinguish between healthy and impure vaccine lymph.

I may say that my wife is even more strongly opposed to vaccination than I am, having seen evidence of its ill effects. She would be very reluctant to have the child put through the process. Indeed, I believe she would not do so unless compelled, and I can be no party to the exercise of such compulsion. I have only to add that the child is in delicate health. Two medical gentlemen have at different times given certificates that he was unfit to be vaccinated. The last certificate was obtained about three months ago. The child is now much better, though not at all robust. There would probably be no difficulty in getting another certificate testifying that he is still unfit for the operation; but as both the mother and I have made up our minds not to have him vaccinated, if we can prevent it, we thought it would not be either fair or respectful to evade or postpone the operation by a plea which, however valid, is not, after all, the chief reason for our refusal to obey the law. I must apologise for troubling you at such length, and now respectfully leave the matter in your hands.—Very truly yours,

THOMAS BURT.

EXAMINATION FOR VACCINATION IN BOARD SCHOOLS.

There has been an extraordinary scare in the neighbourhood of Wolverhampton. Rumours were afloat that it was the intention of Government to send doctors to the schools, and revaccinate the children. At Bilston a crowd of excited parents surrounded two schools and took the children away. At Dudley the police had to interfere to prevent a riot at one school, and another school was closed.

The London School Board was recently applied to by the Local Government Board to allow official vaccinators to examine the children at the Board Schools, but the Board very properly refused permission in the following terms—

"School Board London,
6*th April*, 1881.

"Sir,—Your letter of the 19th ult., has been under the consideration of the Board.

"I am directed in reply to state that the Board regret that they are unable to grant permission for medical officers to examine the arms of children attending school for the purpose of ascertaining whether they have been properly vaccinated, inasmuch as they are of opinion that it would give rise to alarm amongst many of the parents of children attending the school, and would have the effect of emptying the schools to a considerable extent, and would make the Board's work of education more difficult.—I am, sir, your obedient servant,

"G. W. Croad,
"Clerk of the Board.

"To the Secretary, Education Department, Whitehall."

Mr. Amos Booth, Secretary of the National Anti-Compulsory Vaccination League, was brought before the Leicester magistrates on 2nd May, charged with neglecting to have his child, Archibald Taylor, vaccinated. Mr. Booth made a spirited defence which lasted two hours, but in the end he was fined 10s. and £2 costs—the costs including the expenses of two medical men he had subpœnaed. In the course of the proceedings Mr. Booth read the following letter from Mr. P. A. Taylor, M.P.—

"Brighton, 19th March, 1881.

"Dear Mr. Booth,—I am glad you absolutely refuse to have my little namesake vaccinated. I should have to disclaim him otherwise. I have now studied the statistics of small-pox for years, and I do not hesitate to say that the practice of vaccination is an entire delusion. There is no trustworthy evidence that it has the slightest protective effect, while its ill effects are but too manifest. I am convinced that compulsion, at any rate, must cease as soon as the facts are made public. At present, the press is for the most part closed against us through the bold and unscrupulous statements of a class of medical experts—much the same set who, by similar devices, have saddled us with disgraceful C.D. Acts.—Yours truly, P. A. Taylor."

JUDGMENT WITH MERCY.

MRS. CATHERINE HYDE was tried at the Central Criminal Court on 24th May for having registered her child from a fictitious address in order to save it from vaccination, having already lost one child through submission to the abominable rite. The prosecution was conducted by the Treasury at the instigation of the Registrar-General. Mrs. Hyde pleaded guilty, and the Recorder, Sir Thomas Chambers, in pronouncing sentence, observed—

"My views regarding vaccination are pretty well known, but this is not the place to express them. The whole medical profession is in controversy as to what virus is safe and efficacious, but in the meantime the law must be obeyed. The motive for the offence was an ample one. A mother was intent on saving a child from the peril that had overtaken a former one. The newspapers abound with reports of vaccination disasters from all parts of the country, and I think it would be well if the law were so altered as to cease from conflicting with parental affection. The child in question has not died of small-pox, but the defendant has broken the law and committed a misdemeanour. She has given her reason for so doing, and I have no doubt that it is true."

The Recorder ordered her to be imprisoned for two days, the effect of which was that she was at once discharged.

"FAR MORE IMPORTANT THAN VACCINATION."—That small-pox is increasing in London is ugly news—seventy-seven deaths last week against seventy-two in the previous week. When will patients and their friends take those precautions against the spread of the disease which, after all, are far more important than vaccination?—*Weekly Dispatch*, 24th April.

VACCINATION ALL SUFFICIENT.—Replying to Mr. Daniel Grant, M.P. for Marylebone, on 10th March, Mr. Dodson said the Local Government Board had no funds applicable for offering premiums for the best information as to the origin, growth and development of small-pox, in order to minimise its power of infection, and indicate means for its extinction.—Just so. With Vaccination to answer for small-pox, what is left to desire? Mr. Grant must be thoughtless, or unreasonable, or faithless to suggest inquiry and experiment.

SMALL-POX AND VACCINATION IN SWEDEN.—Through the kindness of a friend the London Society has been enabled to reproduce Mr. P. A. Siljeström's Tables illustrative of the prevalence of small-pox in Sweden from 1774 to 1878 with reference to the general mortality. Sweden has often been described as the best vaccinated country in Europe where small-pox had been completely stamped out. Mr. Siljeström's Tables prove that small-pox has prevailed and subsided without any reference to vaccination; and, moreover, that small-pox when prevalent has not raised the mortality of the kingdom, nor when absent has the mortality declined. What is true of Sweden in these respects is true of our own and other countries, but it is satisfactory to have the truth made visible and indisputable in these diagrams. Every anti-vaccinator should possess a copy of the Tables. The price is only 1d.

TRANSMUTATION OF ZYMOTIC DISEASES.

DR. CARPENTER asks in the *Times*, Why the weekly fatal cases of small-pox in London are reckoned by tens and not by thousands? It is the anti-vaccinator who is entitled to ask that question. Those who have not been vaccinated within seven years have, as we are continually told, lost their protection. There are hundreds of thousands of this class; and why does the wandering contagion neglect them?

The statement that the sharply defined lines drawn by specialists between different (so-called) specific diseases are no more tenable than those drawn between the species of cultivated plants, is an objection which I have repeatedly urged against the vaccination theory. There is endless variety between cases of small-pox; and cases of measles are equally dissimilar. The eruptions vary exceedingly in number and character, and it is often difficult for the doctor to decide which of the two "species" of disease the patient is affected with. The same difficulty occurs at times between small-pox and syphilis — two closely allied diseases. These remarks might be extended to all the intermingling zymotics. Compare a case of small-pox verging into measles with a case of measles verging into small-pox—can it be supposed that vaccination protects in the one case and is powerless in the other?

H. D. D.

MR. W. J. COLLINS, B. Sc., M.R.C.S., delivered a lecture at the Eleusis Club, Chelsea, on 22nd May, entitled, "Ought Vaccination to be Compulsory?" There was a large audience, and Mr. Collins was heard with close attention and manifest sympathy. Mr. Tebb presided, and made a preliminary address, full of information and encouragement. A debate followed the lecture in which there was more inquiry than contention, and we left the meeting with a clear sense that the truth had been well set forth and established in many minds.

POPULAR FEELING IN LONDON.—A large meeting was held in the Rev. Dr. Seddon's Tabernacle, Victoria Park, on 23rd May, to hear a lecture on Vaccination by Dr. Pearce. Dr. Seddon presided, and read a letter to the meeting from Dr. Tripe, Medical Officer of Health for Hackney, setting forth the various stock fallacies in favour of vaccination, which Dr. Pearce effectually disposed of. It was wonderful and gratifying to observe the steady attention wherewith the large assembly followed Dr. Pearce throughout his lengthy exposition of statistical and other evidence. A debate followed, but the opposition was of little account, the speakers against vaccination, Dr. Dixon, Mr. George Verney, Mr. Fitch and Mr. Young having it practically all their own way. Resolutions against vaccination were carried with few dissentients. It is obvious from this and other meetings in London that the popular judgment simply requires instruction to pronounce energetically against vaccination. The mischiefs of the practice are known and felt everywhere, and are only submitted to because they are supposed to be unavoidable. There were several medical men present in the Tabernacle, but not one of them had a word to say in defence of vaccination.

QUESTION AND EVASION.

In the House of Commons on 26th May, Mr. P. A. Taylor asked the President of the Local Government Board, whether his attention had been directed to the fact that an absolute diversity of opinion exists at this moment among our highest medical authorities in regard to certain lymph still used; Sir Thomas Watson declaring that the lymph which had been largely used at Brighton and elsewhere for the last forty years is variolous, and such as "must have spread about a vast amount of mitigated small-pox;" while Dr. Carpenter asserts that "no vaccinator could be charged with propagating small-pox even though it were put beyond doubt that his vaccine lymph had been remotely derived from a small-pox pustule:" And, whether he did not think it would be safer to discontinue the practice of vaccination altogether until at least our highest medical authorities could agree upon the not unimportant point as to whether the lymph employed was a protection against small-pox, or whether it might not be simply an agent for the diffusion of small-pox.

Mr. Dodson said he believed Sir Thomas Watson did use the words quoted in a letter to a medical journal on 17th January, 1880, but in a subsequent letter he said, referring to an important paper by Mr. Ceely, of which he had no previous knowledge, "A careful study of it convinced me that I was in error in respect to the statement with regard to small-pox and cow-pox. I am in duty bound to acknowledge this, and to apologise for it."

Whether Sir Thomas Watson has surrendered his faith in cow-pox we do not know; but his retractation cited by Mr. Dodson did not apply to his original statement that "variolous lymph spread about a vast amount of mitigated small-pox," but simply to the process which inoculated small-pox undergoes in the cow's body. The answer put into Mr. Dodson's mouth was an artful evasion. Whoever framed it knew that it is the contention of the animal vaccinators that small-pox remains small-pox however inoculated on the cow, and that Sir Thomas Watson has never asserted the contrary.

Mr. Dodson continued, saying, that he could not admit that there was any substantial difference among the highest medical authorities as to whether the lymph employed was a protection against small-pox, or whether it might not be an agent for its diffusion. As far as he was aware, the great bulk of the authorities were of opinion that the lymph used did protect against small-pox.

But which lymph? The lymph denounced by Sir Thomas Watson as a generator of small-pox? or the lymph commended by Dr. Carpenter? Here, again, Mr. Dodson was put forward to practise deliberate evasion.

Finally, said Mr. Dodson, if all measures for preventing or curing disease were to be postponed until doctors were agreed, not only vaccination, but all medical treatment would have to be suspended for centuries.

Yes: but of disagreements, some are essential, and some non-essential; and it cannot be pretended, even by vaccinators, that the lymphs of diverse orders in use are all effective against small-pox. It is evident from the replies delivered through Mr. Dodson that he is spokesman for some artful dodgers, who presume boldly on the ignorance of the House of Commons.

A MEDICAL MAN WHO SPEAKS OUT.

In the *Belfast Evening Telegraph* of 27th May, appeared the following letter:—

Vaccination consists in disseminating through the blood a quantity of decomposing animal matter, erroneously described as "pure" or "genuine" vaccine lymph. This so-called lymph abounds in all the elements of disease, derivable from the source whence it is extracted. There is no more certain method of propagating most of "the ills to which the flesh is heir," and as if to render escape from contamination absolutely impossible, the Legislature, in its wisdom, or perhaps, better say in its tyrannical folly, has rendered the ordeal compulsory. Vaccination affords provisional immunity in many instances from that terrible scourge, small-pox; yet it must not be forgotten deaths may and do occur among the vaccinated. The insufficiency and uncertainty of the protection obtained by vaccination is considered a patent objection by many; yet I believe much more serious objections still can be fairly urged against the process. The propagation of syphilis, scrofula, cutaneous diseases, and a host of hereditary maladies, is fairly attributable to vaccination, and in many instances have been directly traced to it. I have observed four cases myself in which the connection was unmistakable, and many others in which it was more or less obscure; in the latter I allow vaccination "the benefit of the doubt." There is no method, either chemical or microscopical, of ascertaining with any degree of certainty the purity or impurity of so-called lymph; consequently, in any given case we are utterly unable to predicate the results.

We may be laying the foundation of all the hideous diseases already mentioned instead of "stamping out" small-pox. All is guesswork, hazard, and chance. If the tenure of a man's existence were equally uncertain, would an insurance company issue his policy on ordinary terms? I think not. Now, the question comes to be—is it reasonable that parents should be compelled, with the alternative of fines and imprisonment, to incur the risk of permanently ruining their progeny? They are forced to act contrary to the dictates of their own conscience and common sense—all for the problematical possibility of obtaining partial or even complete protection.

If immunity or complete protection were secured without the liability of introducing extraneous sources of danger, I should firmly advocate vaccination, but as matters stand, whether the process will turn out a blessing or a curse is very doubtful. The cure is often worse than the disease. Vaccination should be optional. Everybody would then be satisfied.

Those who manifest a selective preference for the scars of small-pox, compared with the discoloured cicatrices of scrofula (to say nothing of the other abominable maladies referred to, could gratify their taste and *vice versa*.

J. A. M'Munn, M.B., L.R.C.S., &c.

Belfast, 26th May, 1881

CONGENITAL DISEASES.

CONGENITAL DISEASES: Diseases that are born with one. (*Ainsworth's Latin Dictionary.*)

CONGENITAL: Se dit des maladies qu' on apporte en naissant. (Noel et Chapsal, *Dictionnaire Francais.*)

I PRESUME we are born with the possibilities of receiving and of suffering from all human diseases, just as we are born with the possibilities of being hanged or drowned unless preserved, protected, or "insusceptible." A state of disease existing in the structure of the parent, may be transmitted in more or less activity to the child. But the notion that every child is born with a number of contradictory diseases requiring immediate suppression and permanent supervision by the medical profession, ought first to be passed through the alembic of the annual novelties of the British Association, and stamped with its presidential infallibility.

A state of inebriety, and also a common cold, are for the time, states of disease. There is an average death-rate for each; but there is no natural death-rate. It is the same with small-pox — nature's attempt to rid the system of impurities. In 1807 the London College of Physicians declared the natural death-rate of small-pox to be one-sixth, or 17 per cent. of cases. In 1881 Dr. Carpenter makes it one-fourth, or 25 per cent., and instances Iceland in proof. He further bases an argument on the supposition that 44 per cent. is the natural death-rate of the unvaccinated. At least, so I understand his letter in the *Times*.

17 : 25 : 44 :—A variation of equally cogent facts. Anti-vaccinators not knowing which rate to die at, go on living and waiting till their time expires.

When the new protective diseases against scarlatina, measles, etc., are discovered, every person who has neither had these diseases nor their respective protectives, will be a source of danger to other people's children, even to the protected. Why is he not a source of such danger now? We are evidently getting nearer to the long-wished-for medical Elysium, when everyone will be compelled to be always maturing a doctor's bill.

The following extract from the *Gentleman's Magazine* for 1802 reads like a modern paragragh about the Asylums Board trial—

"*Sunderland.*—A dispute arose among the medical gentlemen respecting the limits of contagion. While one party attempted to prove the limited sphere of action of contagion, and proposed the establishment of fever wards for the extinction of fever, the opposite party declared that it could be wafted to a considerable distance by the wind, and consequently that the plan was attended with the utmost danger."

Dr. Lettsom and a friend were the manufacturers of the great vaccine statistic in every day use, that the small-pox deaths in England before vaccination were 3000 per million. He also published in the *Gentleman's Magazine* of 1802 the following statistic: "The vaccine inoculation is a certain security against small-pox, and is never fatal." He proceeds:—"We may piously view the discovery as providential. The cow-pock is no disease. It produces but one small spot or pimple where the lancet touches, and usually no more."

A correspondent, who signs himself "A Friend of Lettsom's," says in the same volume, he "agrees that if the matter be taken *immediately* from the cow there can be no more hazard than in drinking the milk of the creature; but if it be transmitted from arm to arm, he wishes to be informed if there is not equal hazard of any disorder the person has being communicated to the person so inoculated. It has been disputed formerly of the old inoculation whether any other disease could be transmitted with the small-pox. Dr. Lettsom grants there may, which is a serious hazard."

In the *Gentleman's Magazine* of 1803 a correspondent writes, "A maltster at Salisbury was inoculated for the cow-pock twice. The second time it took, and he is now ill of the small-pox. Many of the great have been to see him." The Royal Jennerian Society replied that the fact of the presence of the small-pox was a stubborn proof of the absence of the cow-pock, which only appears in one single pimple. The maltster therefore never had the cow-pox. H. D. D.

KILLED BY RE-VACCINATION.—In consequence of a case or two of small-pox having occurred in the neighbourhood of Sittingbourne, re-vaccination has been freely resorted to by many of the inhabitants. Among the number was Miss Caroline Chambers, a lady over sixty years old, who, notwithstanding her age, was re-vaccinated. Her arm did badly from the first, and she gradually grew worse, and died from the effects.—*Echo*, 24th May.

COMPULSORY RE-VACCINATION.—What we want in London, and, in fact, in England generally, is that re-vaccination be as fully spread and as efficiently carried out as primary vaccination. Re-vaccination has probably never been so largely practised in the metropolis as now, under the combined terror of the epidemic and the monitions of the Local Government Board. But are we not in a position to go further? The key to the success of our primary vaccination is compulsion. Is it so far out of reach of existing statecraft that compulsion in some form could not be brought to bear on re-vaccination?—*The Lancet*, 14th May.

MARYLEBONE PHILOSOPHY.—Mr. Alex. Wynter Blyth is Medical Officer of Health for Marylebone, and is allowed to publish, at the expense of the parish, a monthly paper, which he calls its *Sanitary Chronicles*. In the number for April he explains that the current small-pox epidemic has not attained far greater proportions "owing to the fact that the infectious particles have been received into human tissues, *the Varioplasm of which has been decreased by art.*" What Varioplasm is, he defines in a note thus—"By the term Varioplasm, I mean that *unknown substance* which is for the most part situated in and beneath the true skin, and which nourishes the infective particles of Small-Pox. When this Varioplasm is partially or completely exhausted by an attack of small-pox, or by the inoculation of vaccine, it appears to be only slowly reproduced."—Some sanguine people imagine that we live under the régime of positive science, and that we no longer take fancies for facts as did our forefathers. A little reading in vaccination literature would disenchant them. What, for instance, do they think of Varioplasm and its prophet?

A LITTLE PROCLAMATION.

BY THE GOVERNMENT TO THE PUBLIC.

COME! A truce to hesitation:
Just submit to vaccination,
To condemn to extirpation one particular disease;
And in place of one affection
You can have a whole selection—
Any number of diseases—any quantity you please.

Mind, we don't provide a station
For efficient vaccination,
And we've taken no precautions for its being rightly done;
So to run about inquiring
For a heifer will be tiring,
And you'll find yourself perspiring, for you'll have so far to run.

Lor! But don't be sinking-hearted:
If you want the lymph imparted
You will only have to choose among the babies which abound;
Let distrust for ever slumber—
Ev'ry one among the number
Is the finest and the healthiest for many miles around.

It will all be pleasant sailing
Till you find your system ailing
From the malady imparted by some healthy little man;—
Not a babe, from bound to border,
But inherits *some* disorder,
Big or little, from its daddy, or its mammy, or its gran.

We are not prepared to answer
For its being gout or cancer,
Or a member of the army of diseases of the skin,
For it might be indigestion—
As it 's quite an open question—
Or consumption, or a bunion that you'll gaily revel in.

There, of course, is no foreseeing
As to chances of its being
Some deplorable incurable affection of the brain;
There, it can't be pre-detected
How you'll find yourself affected,
But you won't enjoy immunity, we tell you once again.

So submit to legislation,
And apply for vaccination
To condemn to extirpation one particular complaint;
And instead of one affection
You can have a whole selection;
So you'll kindly choose your favourite hereditary taint.

—From *Fun*, 4th May.

MR. J. W. HUTCHINSON, M.P.—At a meeting of his constituents in Halifax on 20th April, Mr. Hutchinson, when asked whether he was prepared to support Mr. P. A. Taylor's motion for the repeal of the Compulsory Vaccination Acts, replied, "It is a question, I admit, that cannot be pooh-poohed much longer. I am surprised at the growth of public opinion on the subject, and the law, it is plain, cannot be allowed to rest in its present condition. I must say also, that my faith in vaccination has of late been considerably shaken, and I intend carefully to investigate for myself, and until I come to a conclusion I shall refrain from voting."

TO OUR READERS.

THE VACCINATION INQUIRER will henceforth appear as the organ of the LONDON SOCIETY FOR THE ABOLITION OF COMPULSORY VACCINATION; and in order to extend its circulation, the price has been reduced to one penny, or 1s. 6d. per annum post free. We would ask—

1st. That you subscribe for the INQUIRER, either ordering it through your bookseller, or from the Office of the Society.

2nd. That you will try to have it placed regularly on the tables of any reading-rooms in your neighbourhood.

3rd. That you will endeavour to obtain subscribers for the INQUIRER, taking 1s. 6d. for a year, and forwarding the money to the Office. Many who would never subscribe of themselves will readily do so if this little trouble be taken off their hands.

4th. That, if you can afford it, you will subscribe for extra copies, either circulating them yourself, or sending addresses to which they may be posted.

5th. That you will send 6d. or 1s. from time to time for selections of back numbers to be posted to medical men and others whom you wish to inform and influence.

As all who are connected with reforms know, there is nothing to compare with a well-edited periodical for keeping interest alive, for stimulating activity, and for winning adherents. No pains will be spared to make the VACCINATION INQUIRER a worthy representative of our cause, and we look confidently to our friends to place their names on our subscription list and to extend our circulation by such means as we have suggested.

It should be added, that subscribers of one guinea per annum to the funds of the LONDON SOCIETY are entitled to the INQUIRER monthly, and also to a copy of any new publications issued by the SOCIETY.

WILLIAM YOUNG,
Secretary.

114 VICTORIA STREET,
WESTMINSTER, S. W.

MONTHLY CONFERENCE.

THE next conference of the London Society for the Abolition of Compulsory Vaccination will be held in the Society's large room, 114 Victoria Street, Westminster, on Wednesday evening, 22nd June, at 7.30 o'clock. Dr. Pearce will open the discussion, and as it will be the first public meeting in the Society's new premises, a large attendance is expected.

WILLIAM YOUNG, *Secretary.*

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 28.] JULY, 1881. [Price 1d.

NOTES OF THE MONTH.

A Memorandum of Dr. Buchanan, Medical Officer of the Local Government Board, "On the Present Prevalence of Small-Pox in London among Vaccinated and Unvaccinated Persons respectively," was issued on the 9th of June, and has been received with ecstasies by the press as making an end of the ignorant and fanatical contention of those who do not believe in Jenner, but who, as the Irishman said, "require a deal of killing." It seems that during the past fifty-two weeks there have died of small-pox in London 1532 persons, of whom 825 were certified as vaccinated, 637 as not vaccinated, and 570 whose condition as to vaccination was unknown. Having got these figures, it is easy to imagine how Dr. Buchanan, assisted by Dr. Stevens, conjures with them; but it is needless to follow him into details. The most faultless logic is no better than the worst if the premisses be unsound; and the leading premiss of Dr. Buchanan's argument is so grossly untrue, that his deductions are worthless; and however they may impose for a time on the public ignorance, they will be dismissed by anti-vaccinators with derision.

Dr. Buchanan's leading premiss is this—

"As no one suggests that the vaccinated and unvaccinated classes live under conditions differing from each other in their influence on small-pox, unless it be this one condition of vaccination, it follows for a first inference, that the vaccinated are much less liable to die of small-pox than the unvaccinated."

No one suggests that there is any difference between the vaccinated and unvaccinated save in the item of vaccination! Why, it is the perpetual assertion of those who are taunted with the higher mortality of the unvaccinated, that there is a difference, and a wide difference—that the unvaccinated are a class apart, and that with whatever disease afflicted they would exhibit a higher mortality than the vaccinated. Practically the entire infancy of the more comfortable classes—96 per cent. of the whole population are vaccinated. Who then are the unvaccinated? They are children so feeble that it is not safe to vaccinate them; so that as Mr. E. Robinson has pointed out, "Vaccination positively divides the population into the strong and perfectly healthy, and into the weakly and ailing—those unfit even to undergo the minor operation of vaccination." To these feeble folk have to be added the offspring of the vagrant population, without domicile, who escape the inquisition of the vaccination officer. These are the unvaccinated, and this is the class which Dr. Buchanan has the audacity to adduce as differing in nothing, unless in the one condition of vaccination, from the vaccinated! As we have sometimes urged, let inquiry be instituted as to the mortality of the vaccinated and unvaccinated from pneumonia, or scarlet fever, or measles. The result would doubtless prove, that vaccination is as effective against these ailments as it is against small-pox. In short, the conditions of the unvaccinated are such, that in any contest for life they must needs suffer terribly.

At the same time we would not have it supposed that we accept Dr. Buchanan's figures as correct—that of the 1532 who died of small-pox, 637 were unvaccinated, whilst the condition of 570 as to vaccination was unknown. We have had far too much experience of the manner in which small-pox statistics are got up to have faith in their accuracy. Such is the bias induced by training in the Jennerian superstition, that a severe or fatal case of small-pox is taken by most medical men for proof of the absence of

vaccination; and we have no doubt that were a scrutiny possible, the number, 637, would suffer prodigious reduction. The 570 undescribed we take to be chiefly cases where the evidence as to vaccination was clear, but being thought incredible in consequence of the fatal issues, open verdicts were returned. Far more instructive than details as to a matter of such trivial significance as vaccination would be particulars as to the social and physical environment of the 1532 who died. Mr. Francis Vacher tells us that in the Birkenhead epidemic of 1877, when 603 persons were affected, the entire number, with six exceptions, belonged to the labouring classes resident in overcrowded and insalubrious quarters. Investigation, we have no doubt, would reveal the same fact as to the majority of sufferers from London small-pox, compelling us to the conclusion that the conditions which generate small-pox are the conditions that generate correlated forms of zymotic disease. That a truth so obvious should be overlooked, and that men accounted rational should recommend a foul and dangerous rite for security, where the whole drift of experience indicates a resort to those sanitary measures which are efficient against all forms of fever, proves how thin is the varnish of our boasted science. With a scratch it peels off, and reveals a habit of mind kindred with that of our forefathers, whose faith in witchcraft is the true analogue of ours in vaccination.

THE *Daily News*, which has hitherto preserved a certain degree of sanity on the vaccination question, has surrendered to Dr. Buchanan, accepted his statistics, and commenced to roar after the manner of Mr. Ernest Hart and Dr. Corfield. In an article, 14th June, we read, "There has been a progressive increase of small-pox in London in each of the last decades; and many medical authorities regard this increase, *as the direct consequence of the agitation against vaccination.*" Whilst the charge is too absurd for discussion, it affords fresh illustration of the unscrupulous tactics of some of our adversaries. It is akin to Marks Marson's declaration before the Committee of the House of Commons, that fathers objected to vaccination in order that small-pox might kill off their children, leaving them fewer to work for.

IF the opponents of vaccination are to have the discredit of causing epidemics of small-pox, they ought also to have the credit of the general good health and low rate of mortality which commonly attend such epidemics; and the balance thus adjusted will be largely in their favour. Alongside the outcries of the London press on the horrors of small-pox and the sure salvation afforded by vaccination and re-vaccination, there runs the persistent record of the Registrar-General testifying that the prevailing death-rate is low, and under the average of recent years. By-and-by the epidemic will pass away, the death-rate will rise, and excited editors will recover composure. It is not mortality distresses them, but the mode of mortality. They remind us of the Edinburgh undertaker who did not object to suicide, if only the poor creatures who were weary of their lives left decent corpses behind—did not blow out their brains, cut their throats, or otherwise make repulsive spectacles. On the same principle our philosophic editors would prefer a death-rate of 30 to 20 per thousand, if only the higher rate did not include corpses disfigured with small-pox. Such are the sanitary æsthetics of the metropolitan press!

SOME people, it is said, have so little comfort out of their religion that they could scarcely be more miserable if they had none; and the vaccinated and re-vaccinated appear to be in a similar case. They assure us they are safe, perfectly safe, and yet abide in fear and trembling. For instance, we read that owing to an outbreak of small-pox at Gravesend, the Commandant of the Chatham District issued an order that no troops were to be allowed to visit the town; putting a stop at the same time to rifle practice at the Gravesend ranges. Now as we all know that soldiers are fortified and re-fortified with the whole virtue of the Jennerian rite, and that even nurses in small-pox hospitals enjoy absolute immunity from infection by reason of the due repetition of the same rite, why this terror lest any of them should venture into, or even draw nigh to Gravesend? Can we call such faith in vaccination living faith?

WE have received a most instructive document from Melbourne, namely, "A Report of a Select Committee of the Legislative Assembly of Victoria upon Vaccination Law." In Victoria, as in Australia generally, small-pox is scarcely known; and the reason given by Dr. Beaney is, that "the hot winds completely dissipate the disease, moisture being essential to the development of disease germs." None the less is vaccination practised and enforced by statute. The abject subservience of the colonial mind, in

this and other matters, to home opinion is grotesquely absurd. Even our folly is implicitly imitated when the very pretext for the folly is absent. Vaccination in Victoria has, however, been attended with so many obvious injuries, especially when practised in hot weather, that endurance became no longer possible, and an inquiry was ordered by the Legislative Assembly. The Committee took the evidence of the leading practitioners and public vaccinators of the colony; and to any one who is pleased to believe that vaccination is a well defined department of medical art, we may commend the perusal of the several deliverances of these gentlemen. The Committee put the case mildly when they report that "the opinions expressed were so conflicting and contradictory as to render them of little practical value." On the question of re-vaccination, for example, some stated that it was not necessary, others that it should take place every seven years, whilst others again would extend the period to fourteen years. There was the same diversity of opinion with regard to the number of punctures or incisions to be made on the arm. One witness affirmed that the operation would be of little efficacy unless four punctures were made, and suggested that all vaccinators should be compelled to make that number. Another witness considered one cicatrix sufficient, and a third thought it would be better left to the discretion of the medical man, as some children were not strong enough to bear four marks. Greater unanimity prevailed on the question of the invaccination of other diseases, such as syphilis and scrofula, although some of the witnesses maintained there would be no liability to such transmission if blood were not drawn with the vaccine virus. Dr. Beaney and Dr. Sparling, however, mentioned instances that had come under their own observation of syphilis and erysipelas having been communicated to children from virus which contained no trace of blood. Yet even with such testimony before them, the Committee had not the courage to report adversely to vaccination! They recommended that the practice be discontinued in the hot weather of January and February, and "to allay alarm in the public mind, that a Bill be brought in to establish depôts from which animal lymph from young heifers" should be supplied for general use. Here we observe the same subservience coupled with greater ignorance. Animal vaccination has recently been "written up" with singular assiduity by a few hands in England, and has obtained a certain popularity; but by most of the leaders of the medical profession "pure lymph from the calf" is regarded as so much pure humbug, and is not openly denounced because controversy might endanger the entire vaccination fabric. Of course the Victorians cannot be expected to know what we know: they interpret home opinion by what appears on the surface; and from the surface they naturally infer that England has "gone in" for animal vaccination. It is a complete mistake: Dr. Cameron, M.P., the leader of our calf lymphers, has to tell a very different story. He and his friends have not been resisted by the Local Government Board, but they have been temporised with in the expectation that the clamour they have raised over impure and useless vaccination would in due season subside.

It is to be hoped that when the Report is considered by the Assembly that some members may find courage to confront the small-pox bogey, and to ask whether it is worth while to incur the certain injuries of vaccination in order to avert the improbable danger of a variolous epidemic. If vaccination were necessary in England, it would none the less be a superfluity in Victoria; but admitting a possible outbreak of small-pox, what would the inhabitants of Melbourne suffer? Arguing from our London experience, not a life would be lost that would not fall under some other form of zymotic disease. Nor among well-fed and well-housed Victorians in a dry climate is small-pox ever likely to be epidemic. Here in London where a panic is in full swing, the disease does not diffuse itself to any extent outside the lower orders, nor in the country. It is in wholesome conditions of life that we are saved from small-pox, and not by a superstitious rite, however performed or frequently repeated.

There is an article in the *North American Review* for June by Dr. Austin Flint of New York, which is worth notice as a more flagrant example of the ignorance and fanaticism of our adversaries. The ignorance we pass over, being the ordinary commonplace of books of reference, but the fanaticism we have condensed like pemmican in this passage—

"The fulfilment of Jenner's expectation that small-pox would be blotted out of the list of existing diseases is among the possibilities. It can be fulfilled only by extending to the whole human race the security afforded by vaccination and re-vaccinations. This cannot be done except by the diffusion of knowledge of the subject, and by Governmental power. Vaccination and re-vaccinations must be made everywhere compulsory. If they who resist their enforcement were alone the victims of the disease, society could afford to let them die 'as the fool dieth.' The question is whether society shall suffer on account of their folly. The right of society to protect itself in this matter is as clear as that of placing under restraint a homicidal maniac."

The vaccination and re-vaccinations of the whole human race is a programme worthy of a compatriot of Mr. Jefferson Brick. We have some bold fellows in England, but not Mr. Ernest Hart himself has proposed to subject the human race to the dominion of Jenner with the addition of compulsory re-vaccinations. Nor are medical men on this side of the Atlantic sanguine as to more limited possibilities. Dr. Ballard did no more than express their common opinion in saying, "Experience has not verified Jenner's prediction. Small-pox has not been eradicated. Let me add that scientific observation and reasoning give no countenance to the belief that it ever will be eradicated from civilised communities."

THE STORY OF A GREAT DELUSION.

CHAPTER XXVIII.

JENNER'S LATER WRITINGS

JENNER'S later writings were chiefly apologies for the failures of vaccination. His position was one of much difficulty and danger, and its peculiarity is rarely, if ever, recognised. For example, how few know that his *Inquiry* published in 1798, "that master-piece of medical induction," according to Mr. John Simon, was kept out of print and referred to as rarely as possible after 1801-02.

"Why?"

The answer to the question is so important that at the risk of some repetition we give it explicitly.

The *Inquiry* was suppressed because of its ascription of cow-pox to horse-grease.

It was the common belief of dairy-maids in Gloucestershire and elsewhere that to have had cow-pox was to be secure from small-pox. Jenner, if we may believe his biographer Baron, was much impressed by the rustic superstition, and brought it so persistently before his medical brethren at their convivial assemblies, that they threatened to expel him if he bored them any longer with the subject. "It is true," they said, "that the maids believe an attack of cow-pox keeps off small-pox, but we know they are wrong; for we have all seen cases of small-pox after cow-pox."* To this argument Jenner was compelled to assent.

Thus frustrated, his ingenuity took another turn. It was the belief of farriers that if infected in dressing horses' greasy heels, they too were secure from small-pox. The area of this conviction was narrower than that of the dairy-maids, farriers being neither so numerous, nor so observant of their beauty: but Jenner entertained their faith and converted it to his purpose.

Horse-grease protected from small-pox, if cow-pox did not. But might there not be one sort of cow-pox that answered to the dairy-maids' faith, if another sort did not? Happy thought! The defensive sort was derived from the horse-grease which protected the farriers: the non-defensive originated spontaneously on the cows. Men, fresh from handling horses' greasy heels, milked cows and communicated to them the horses' disease. Milkmaids, who in turn contracted from the cows that sort of pox, were like the farriers secure from small-pox, yea securer; whilst milkmaids who contracted pox spontaneously developed on cows were not secure. The milkmaids' superstition was therefore justifiable: they were right and they were wrong—right when they got pox through the cow from the horse; wrong when they got pox from the cow simply.

Why then, it may be asked, did not Jenner dismiss the cow from consideration? Why did he not base his prescription on the farriers' experience, and use and recommend horse-grease exclusively for inoculation? The question is an obvious one, but it is not easy to make out Jenner's answer with precision. His assertion was that—

"The virus from the horse is not to be relied upon as rendering the system secure from variolous infection, but the matter produced by it on the nipple of the cow is perfectly so"—*

which was to say that horse-grease attained its highest prophylaxy after transmission through the cow.

Such was the doctrine of the *Inquiry*, that master-piece of medical induction.

When the doctrine came to be reduced to practice, difficulties arose. Cow-pox was considered wholesome and credible, whilst horse-grease was repulsive and incredible. Still fact was fact; and many were ready to accept horse-grease through the cow, or without the cow, if such indeed were the source of the new salvation. Cow-pox proved to be a rare commodity, whilst horse-grease was common, and numerous attempts were made to produce cow-pox by means of grease, but ineffectually. At some attempts, Jenner officiated. John Marshall records that—

"Mr. Sewell, Assistant Professor at the Royal Veterinary College, informs me that he was a witness to a series of experiments, twice repeated, at the College in the presence of Dr. Jenner, Dr. Woodville, Mr. Wachsell, and Mr. Turner, with a view to produce the vaccine disease on the teats of a cow. The matter of grease had been immediately taken from the horse, and variously applied by long continued friction, punctures, scarifications, and by scratching the surface with a needle; but from these trials neither inflammation, nor any affection resembling a pock resulted."†

To this discomfiture Jenner had to submit. His ascription of cow-pox to horse-grease was stigmatised as an error of which the less that was said the better. It is true that other experimenters were more successful, and that Dr. Loy of Whitby and Dr. Sacco of Milan dispensed with the cow as a superfluity and used matter direct from the horse for inoculation, passing the virus from arm to arm into general circulation until what was equine was lost sight of and indistinguishable from what was vaccine; but Jenner did not care to be justified at the risk of his popularity and the money on which he had set his heart. He saw how the wind of public favour was blowing, and went with it. Since horse-grease was disliked, he consented to its oblivion. Dr. Pearson, the chief promoter and organiser of vaccination, scoffed at horse-grease, and used spontaneous cow-pox, which Jenner knew was of no avail against small-pox; but he entered no protest upon that score. On the contrary, he let the futile practice go on; he claimed it as his own,; and he set about manufacturing excuses for the failures which were imminent.

Spurious cow-pox was one of the most dexterous of these excuses. If injury or small-pox followed vaccination, the disaster was ascribed

* *Life of Jenner*, Vol. I. p. 48.

* *Inquiry*, p. 34.

† *A Popular Summary of Vaccination with reference to its Efficacy and Probable Cause of Failure.* By John Marshall, M.R.C.S. and District Vaccinator of the National Vaccine Establishment. London: 1803. Pp. 96.

to spurious cow-pox. Jenner's *Further Observations*, published in 1799, were designed to teach "how to distinguish with accuracy between that peculiar pustule which is the *true* Cow Pock and that which is *spurious*;" and in his *Origin of the Vaccine Inoculation* in 1801 even greater stress was laid on the distinction. By-and-by, however, the excuse worked more harm than advantage. People got terrified with the mischiefs ascribed to spurious cow-pox, and as which was genuine and which spurious was only discoverable in their consequences, they began to decline to have either. It then became expedient to deny spurious cow-pox, which Jenner did. He confessed to the Royal College of Physicians that there was not a true and a false cow-pox; and that by spurious cow-pox he "meant nothing more than to express irregularity in the form and progress of the vaccine pustule from which its efficacy is inferred."*

In view of facts like these, there is little cause for surprise that the publication of Jenner's *Inquiry* with its two supplements was not continued. What he set forth as essential was treated as illusory, whilst the cow-pox in which he had taught there was no security had been brought into use everywhere. Why therefore embarrass himself with proclamations of his own blunders? The believers in vaccination were good-natured and incurious, and he had their homage, which was agreeable and profitable, and why should he dissipate it? The *Inquiry* was printed for the third time in 1801, but "this master-piece of medical induction" has never been republished; and the probability is, that if ever reproduced, it will be to prove to the world the emptiness of its author's pretensions.

Jenner's original promises of immunity from small-pox by inoculation with horse-grease cow-pox were absolute. Thus he wrote—

"The person who has been affected with cow-pox virus is for ever after secure from the infection of the small-pox.†

"It clearly appears that this disease, cow-pox, leaves the constitution in a state of perfect security from the infection of the small-pox.‡

"Cow-pox admits of being inoculated on the human frame with the most perfect ease and safety, and is attended with the singularly beneficial effect of rendering through life the person so inoculated perfectly secure from the infection of the small-pox."§

Experience was not slow to demonstrate the futility of these assurances. At first the facts were flatly denied: it was impossible for small-pox to succeed cow-pox. The evidence, however, grew too strong to be outsworn, and then it was said the cow-pox must have been spurious. As failures accumulated over the operations of Jenner himself and his choice disciples (who were naturally presumed to know and avoid spurious cow-pox) they began to lay great stress on the fact that small-pox itself did not always avert a subsequent attack; and if small-pox did not save from small-pox, why, they demanded, should cow-pox be expected to do more?* Why, indeed! Still the cases of small-pox after cow-pox were as scores to those of small-pox after small-pox, and then the argument was reduced to a competition between variolation and vaccination. "You inoculators with small-pox," said the vaccinators, "are continually having small-pox after variolation, and why should we be expected to be more successful?" Why, indeed! The inoculators with small-pox in turn denied that after efficient variolation small-pox ever occurred, or could possibly occur; and thus the wrangle went on. One thing was plain and certain—the original claim of Jenner for the absolute infallibility of Horse-Grease Cow-Pox as a preventive of Small-Pox was reduced and surrendered bit by bit until it came to this at last—it made small-pox milder.

These repeated surrenders were, however, never ingenuous. Mistakes are inevitable, and they are forgiven when frankly confessed; but frank confession was not Jenner's habit. When vaccination failures had become notorious in 1808, he had the hardihood to assert, that from the outset he had recognised that as small-pox did not always avert small-pox, neither did he expect cow-pox to do so; and cited as proof of his prescience this passage from p. 116 of *Further Observations* in 1799—

"It should be remembered that the constitution cannot, by previous infection, be rendered *totally* insusceptible of the variolous poison; neither the casual, nor the inoculated small-pox, whether it produce the disease in a mild or violent way, can *perfectly* extinguish the susceptibility."†

Here Jenner made a bold draft on his reader's ignorance. It was his claim for horse-grease cow-pox that it conferred an absolute security from small-pox without any qualification whatever. The assumed prescience in 1799 is completely belied when we refer to his arrogant manifesto of 1801. These are his words—

"The scepticism that appeared among the most enlightened of medical men, when my sentiments on Cow-Pox were first promulgated, was highly laudable. To have admitted the truth of a doctrine, at once so novel *and so unlike anything that ever appeared in the Annals of Medicine*, without the test of the most rigid scrutiny, would have bordered upon temerity; but now, when that scrutiny has taken place, not only among ourselves, but in the first professional circles in Europe, and when it has been uniformly found in such abundant instances, that *the human frame, when once it has felt the influence of the genuine Cow-Pox* in the way that has been described, *is never afterwards*, at any period of its existence, *assailable by the Small-Pox*, may I not with perfect confidence congratulate my country and society at large on their beholding, in the mild form of Cow-Pox, an antidote that is capable of extirpating from the earth a disease that is every hour devouring its victims; a disease that has ever been considered as the severest scourge of the human race!"‡

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* *Report of the Royal College of Physicians of London on Vaccination*, 10th April, 1807.

† *Inquiry*, 1798, p. 7. ‡ *Ib.*, p. 58.

§ *Petition to the House of Commons*, 1802.

* Jenner to Dunning, 23rd Dec., 1804. Baron's *Life of Jenner*, Vol. II., p. 26.

† *Facts for the Most Part Unobserved, or not duly noticed respecting Variolous Contagion.* London: 1808, 4to, pp. 17.

‡ *A Continuation of Facts and Observations relative to Cow-Pox.* By Edward Jenner, M.D. London: 1801.

Cow-pox was thus set forth as a prophylactic with powers hitherto unknown and unique; so that he was cut off from the claim of its equivalence with small-pox in character and consequences. He knew in 1799, as we have seen, that infection with small-pox did not render the constitution proof against the subsequent influence of the disease; but in 1801, as we see, it was his express contention that what small-pox failed to do *that* cow-pox did—it protected the constitution perfectly and for ever from small-pox, and nothing to compare with it had ever appeared in the Annals of Medicine. It was only under the pressure of exposure and defeat that he humbled himself to write to Dunning, 1st March, 1806—

"The security given to the constitution by vaccine inoculation *is exactly equal* to that given by the variolous. To expect more from it would be wrong. As failures in the latter are constantly presenting themselves, we must expect to find them in the former also."*

To this pass was the infallible preservative from small-pox, with nothing to match it in the Annals of Medicine, reduced within the experience of seven years!

The most thorough-going and far-reaching of Jenner's excuses for vaccination failures were herpetic affections of the skin. In his journal we read—

"Inoculated C. F. a second time. It is very evident that the affection of the skin called red gum deadens the effect of the vaccine virus. This infant was covered with it when inoculated four days ago. The same happened with Mrs. D.'s infant."†

To Mr. Dunning he wrote from Cheltenham, 25th October, 1804—

"How frequently does the vaccine disease become entangled with herpes! I see that the herpetic fluid is one of those morbid poisons which the human body generates, and when generated, that it may be perpetuated by contact. Children who feed on trash at this season of the year are apt to get distended bellies, and on them it often appears about the lips. This is the most familiar example that I know. *A single vesicle is capable of deranging the action of the vaccine pustule.* Subdue it, and all goes on correctly."‡

And again to the same correspondent, 23rd December, 1804—

"My opinion is that the chief interference with the success of vaccination is herpes in some form or another. I have discovered that it is a very Proteus, assuming as it thinks fit the character of the greater part of the irritative eruptions that assail us."§

Having thus detected an all-sufficient explanation of the failure of vaccination to prevent small-pox, he communicated his discovery to the *Medical and Physical Journal*, August, 1804, in a paper entitled, "On the Varieties and Modifications of the Vaccine Pustule occasioned by an Herpetic State of the Skin," but he complained to Dunning "that it seemed not to have excited the slightest interest." In order to call attention afresh to the subject, he had the article reprinted as a pamphlet at Cheltenham in 1806 and at Gloucester in 1819, but in vain. He complained to Baron in 1817 that he could not get the Board of the National Vaccine Institution to attend to his cautions touching the interference of cutaneous diseases with the progress of the vaccine vesicle. "I am afraid," he observed, "that the extreme ignorance of medical men on this subject will destroy the advantages which the world ought to derive from the practice."*

What of course medical men with the least common-sense perceived was, that the excuse provided for vaccination failures was too liberal to be worth anything. If the least cutaneous eruption was sufficient to frustrate vaccination, what operation could be pronounced efficient? for it could scarcely be intended that every patient should be stripped to the skin and minutely examined for herpetic vesicles. There was nothing transitory in Jenner's opinion about herpes: he harped upon its mischiefs and omnipresence to the close of his life. William Dillwyn of Walthamstow having asked him for any observations that occurred to him on the practice of vaccination for the benefit of Friends in Philadelphia, Jenner replied in a letter dated Berkeley, 19th August, 1818, in which we find these remarks—

"I must candidly acknowledge that I am not at all surprised that a partial prejudice should now and then lift up its head against Vaccination. It is called into existence, not from anything faulty in the principle, but from its wrong and injudicious application. For example, a child, or a family of children, may be in such a state, that the action of the vaccine fluid when applied to the skin shall be either wholly or partially resisted. It may either produce no effect at all, or it may produce pustules varying considerably in their rise, progress and general appearance from those which have been designated *correct*. It was about the year 1804 that I was fortunate enough to discover the general cause of these deviations, and no sooner was it fully impressed on my mind, than I published it to the world. Yet few, very few indeed, among those who vaccinate, have paid any attention to it; yet I am confident, from the review of the practice on an immense scale, that it is a matter which has a greater claim on our attention than any one thing besides connected with Vaccination—indeed I may say than any other thing. What I allude to is a coincident eruptive state of the skin, principally bearing what we call the herpetic or eruptive character. If we vaccinate a child under its influence, we are apt to create confusion. The pustule will participate in the character of the herpetic blotch, and the two thus become blended, forming an appearance that is neither vaccine nor herpetic; but the worst of it is that the patient does not receive that *perfect* security from small-pox infection which is given by the perfect pustule."†

These complaints of the indifference of the medical world to his prophesying show how completely the business of vaccination had passed out of Jenner's hands. The influence of herpes on vaccination although declared by him

* Baron's *Life of Jenner*, Vol. II., p. 28. ‡ *Ib.*, Vol. I., p. 449.
† Baron's *Life of Jenner*, Vol. II., p. 344. § *Ib.*, p. 26.

* *Life of Jenner*, Vol. II., p. 223.

† *Letter from Dr. Edward Jenner to William Dillwyn, Esq., on the Effects of Vaccination in Preserving from the Small-Pox.* Philadelphia Vaccine Society. Philadelphia: 1818. Pp. 20.

to be of the utmost importance, even to the extent of imperilling the advantages of the practice, was disregarded as unworthy of serious attention.

Another of Jenner's apologetics was a pamphlet in 1808* designed to explain away the failure of the variolous test—the test that deceived so many in the early days of vaccination. The inoculated with cow-pox were inoculated with small-pox, and when the small-pox did not "take," it was said, "Behold the perfect protection!" The small-pox inoculators complained bitterly of the hocus pocus. "No wonder," they said, "that when the system is in a fever with bestial corruption that human pox will not 'take,' but try after awhile." And they did try after awhile, and it was found that the vaccinated could be inoculated with small-pox like the unvaccinated. Indeed when it was seen that the vaccinated fell victims to small-pox, many who had been vaccinated resorted to the small-pox inoculators for their supposed superior protection, and received it without hindrance from their previous vaccination. It therefore became judicious to disown the variolous test; but neither in this case was the surrender frankly made, but with prevarications that deprived it of all grace. What the small-pox inoculators maintained, Jenner had to allow, but after this fashion—

"My principal object is to guard those who may think fit to inoculate with variolous matter after vaccination from unnecessary alarms: a pustule may sometimes be thus excited, as on those who have previously gone through small-pox; febrile action in the constitution may follow; and, as has been exemplified, a slight eruption."

For the variolous he recommended the substitution of the vaccine test; saying—

"At the commencement of vaccination, I deemed the variolous test necessary; but I now feel confident that we have one of equal efficacy, and infinitely less hazardous in the re-insertion of the vaccine lymph."

Jenner might have seen that after his proclamation of the influence of herpes on vaccination, there was nothing to be said for the variolous test. When moreover he consented to run vaccination on the same terms as variolation, and admitted that it would be wrong to expect more from the one practice than from the other, he was bound in consisteney to allow that if vaccination was frustrated by eruptions of the skin, it was matter of consequence that variolation should be frustrated by vaccine fever. He informed Dillwyn that he destroyed cutaneous eruptions by the application of *unguentum hydrargyri nitrati*, and then vaccinated with success. The small-pox inoculators did so likewise. When the irritation induced by vaccination had had time to subside, they too variolated with success.

The letter to Dillwyn, 1818, contains some other points which it is instructive to note. For example the following passage proves two things, first, how notorious had become vaccination failures; and, second, how vaccination, from an easy art that any one might practise, had been converted into a mystery to which even "an eminent surgeon" might be unequal. Jenner says—

"One word more with respect to prejudice. How frequently have we seen in the public prints paragraphs of this description—'A gentleman's family, consisting of three or four or half-a-dozen children, were vaccinated by an eminent surgeon, and all went through the disease in the most satisfactory manner, and were pronounced safe; yet, on being exposed to the infection of the small-pox, they all had the disease, but happily they all recovered,' Here, Sir, the mind becomes entangled with a false association. The public conceive that *an eminent surgeon* must be a perfect master of this little branch of our art; but it often happens that he has not stooped to look at anything beyond its outline; and when deviations arise in the progress of the pustules [as from herpes] to that extent which I have pointed out as momentous, they are passed by without attracting any particular attention."

A report having got abroad that Jenner had renounced his faith in vaccination, he replied to Dillwyn—

"My confidence in the efficacy of vaccination to guard the constitution from small-pox is not in the least diminished. That exceptions to the rule have appeared, and that they will appear, I am ready to admit. They have happened after small-pox inoculation; and by the same rule, as the two diseases are so similar, they will also happen after vaccine inoculation."

In presence of such a delaration, it is easy to understand why the *Inquiry* with its supplements was kept out of print, and never referred to. His confidence in vaccination not in the least diminished! In the words cited, he surrendered afresh the claim with which he started, and for which he was paid, namely, that inoculation with cow-pox rendered the constitution proof against small-pox for life, and that the protection thus afforded was without precedent in medical experience.

Having thus under stress of necessity reduced vaccination to the level of variolation, and tried to shelter the failures of the one practice under those of the other, the spirit of the old quack surviving unchanged, he went on to prophesy in the familiar strain—

"It is a curious and most delightful fact that small-pox is flying before vaccination in all directions. In a wide district around me, embracing the most populous part of the county of Gloucester, the small-pox is scarcely heard of; and if it does happen to appear from infection brought by the wandering pauper, it either finds itself insulated, or is rendered incapable of spreading by giving immediately the vaccine security to those within its atmosphere who may happen to remain unprotected."

With Jenner's turn for romance, there is no need for dealing with a statement like the foregoing seriously, else we might ask what was the prevalence of small-pox in Gloucestershire before vaccination? and to what extent had it been cultivated by inoculators? In some parts of England there was a remarkable subsidence of small-pox consequent on the cessation of the

* *Facts for the most part unobserved, or not duly noticed respecting Variolous Contagion.* London: 1808. 4to, Pp. 17.

practice of variolation, for which vaccination had the credit. Jenner resumes—

"Wherever vaccination has been *universally* practised, there the small-pox ceases to exist. It matters not how wide the district, or how populous the city, the result is, and, from the nature of things, must be the same. There is scarcely a part of the civilised world that cannot bear testimony to the truth of this position. For extent of territory, we may turn our eyes to our possessions in the East, and to various parts of South America; and to towns and cities, many of the most conspicuous in Europe.

"In the island of Ceylon, the ravages of small-pox were dreadful, although many efforts had been made to lessen its fatality by variolous inoculation. This, wherever it was practised, produced a spreading of the disease, and made a bad matter worse; so that the people would have nothing to do with it. But after a little time they took to vaccine inoculation very readily, and small-pox became totally extinct.

"From Sweden, too, we have a report that proves the extinction of small-pox throughout the kingdom. Now as the good sense of the Swedes brought about this happy event, why should not Britain avail herself of the great gift, and employ it to the same effect? Here the Boon is distributed with a partial and a sparing hand, and consequently small-pox still exists in several parts of our island."

There was no checking Jenner when he rose into rhodomontade about the myriads of Asia and the vastness of America, but descending to the definite in Ceylon and Sweden we can test him with precision, and as to both we shall find his statements at wide variance with facts. For the present, however, let us keep to our own country and note especially what he had to assert of London in 1818—

"Nevertheless I have the happiness to say, that since the first promulgation of my discovery in 1798, the deaths of small-pox in the British Realms, according to the best estimates I can form, are reduced from more than 40,000 to less than 6,000 annually. The metropolis for the last ten or twelve years exhibited a reduction of about one half only; but during the last two years, vaccination has been more extensively practised than ever, both from the benevolence of private individuals and the faculty, and by public institutions; and this year, 1818, promises a far greater reduction in the number of deaths than any that has preceded it."

In London in 1818 the deaths from small-pox were low (421); but a single year is of little account, and must be viewed in relation to preceding years. Here we have a statement for the decade, 1811-20, taken from the metropolitan Bills of Mortality.

Years.	Burials from all Diseases.	From Small-pox.	From Fevers.	From Measles.
1811	17,043	751	906	235
1812	18,295	1287	783	427
1813	17,322	898	714	550
1814	19,783	638	908	817
1815	19,560	725	1309	711
1816	20,316	653	1299	1106
1817	19,968	1051	1299	725
1818	19,705	421	1170	728
1819	19,228	712	1150	695
1820	19,348	792	1156	720
	190,568	7928	10,694	6714
1801-1810	185,737	12,534	16,204	5680
1791-1800	196,801	18,477	19,880	2707

From this statement we see that the decrease in London small-pox that set in toward the close of the 18th Century was maintained; but that vaccination had aught to do with the decrease there is no reason to believe—unless in so far as the new practice discouraged variolation. How, we ask, could the vaccination of one-tenth of the Londoners (if so many) reduce the small-pox among nine-tenths? We have also to observe that mortality from fevers abated in common with small-pox; and it surely cannot be pretended that that abatement was also due to vaccination! The rational assumption is, that what diminished fevers in London, likewise diminished small-pox. Nor should we overlook the fact, that as the deaths from small-pox declined, those from measles increased; nor the probability that many deaths formerly ascribed to small-pox were derived from measles, and that part of the decline in one column is accounted for by the increase in the other.

Jenner's assertion, that the national mortality from small-pox had been reduced from more than 40,000 to less than 6000 annually had no basis whatever in reality. As we know, the 40,000 deaths were got by multiplying the deaths of a bad year of London small-pox by the population of the United Kingdom—as if London were the standard of England, Ireland, and Scotland! How he obtained the reduced number of 6000 we are left to conjecture; but that one whose business it was to study the statistics of disease, should set forth such exercises of fancy as credible matters of fact, leaves us without hesitation in branding him an arrant quack. In reviewing Jenner's writings we are startled with his inconsistencies, and scarcely less with the carelessness and credulity of his adherents. He set out with the common knowledge that cow-pox did *not* prevent small-pox, and for that reason he substituted pox generated by horse-grease on the cow — *that* was *his* specific. Horse-grease cow-pox could not, however, be procured on demand; and was moreover, disliked on the score of its origin; and cow-pox was resorted to by Pearson and Woodville, and diffused everywhere by acclamation; and Jenner did not only not object, but took credit, and actually was allowed to take credit for the pox he had described as ineffective for the purpose designed! By-and-by cow-pox from horse-grease, or horse-pox, according to the original recipe, was obtained and brought into circulation with Jenner's sympathy, if without his open approval—he discerning that praise and pay were not to be had by that notion. After a while, horse-grease, or horse-pox, was used for inoculation without the intervention of the cow; and that too entered into currency as vaccine, Jenner himself employing and distributing it, although according to his *Inquiry* it was not to be trusted to prevent small-pox.

We repeat these facts, even at the risk of tedium, because it is essential to have them clearly apprehended. For at least three descriptions of virus Jenner stood responsible, namely—

I.—Horse-grease Cow-pox—the virus warranted in his *Inquiry*.

II.—Cow-pox, known by Jenner to be ineffective in preventing small-pox, but favoured by the medical profession and the public.

III.—Horse-grease (said to have been horse-pox) also described by Jenner as ineffective, but used and diffused by him.

To which of these did he attribute the success claimed for vaccination? Apparently to all indifferently; but if one were as good as another, why did he not say so, and proceed to explain how it was that cow-pox did not save the Gloucestershire milk-maids, nor horse-grease the farriers from small-pox? Was it that the power to put such questions, and to answer them, does not consist with the quack's intelligence; and that having realised gold and glory he therein rests content? Observe, too, how when credit was to be had for London vaccination, he took it, though at mortal enmity with the chief agents in the work, repudiating Dr. Walker's practice as subversive of principles he considered essential to success.

Jenner's final publication in 1822 had nothing to do with vaccination, but was a bid for fame in a new direction.* It was an attempt to originate a new method of cure by irritating the skin with tartarated antimony. He had dabbled with the chemical when a young man, and John Hunter had suggested that his preparation should be sold and puffed as Jenner's Tartar Emetic. In his last years he returned to it, and produced a series of cases to prove how many diseases might be alleviated and removed by using it as a counter-irritant—just as in the *Inquiry* he recommended cow-pox inoculation with the same intention. The matter does not concern us further than to observe that the pustules and scars produced by tartarated antimony are almost indistinguishable from those of vaccination; and that tartar emetic has on several occasions been used as a substitute for vaccine virus.

SHIPS AS HOSPITALS.—What can be more astonishing than the assent of the Local Government Board to the Metropolitan Asylums Board borrowing a hulk of a line-of-battle ship from the Admiralty for use as a small-pox hospital in the Thames? If there be a construction least fitted for nursing small-pox patients on board, in the interests of patients, it is an old hulk; if there be a disease least appropriate to be treated on a hulk it is small-pox.—*Lancet*, 4th June.

THUS THEY CUT ONE ANOTHER UP.—In the *Journal of Science* for June we read—"Dr. Grawitz has experimentally refuted both the current hypothesis and the protective action of vaccination in the generalised sense of the term. He shows that blood from rabbits which had been inoculated with Aspergillus, if mixed with a further dose of the spores, developed a luxuriant crop of fungus; hence the blood had neither been exhausted of any pabulum nor had any antidote been developed in it."—VIRCHOW'S *Archiv. für Path. Anatomie.*

* *A Letter to Charles Henry Parry, M.D., on the Influence of Artificial Eruptions in certain diseases incidental to the Human Body; with an Inquiry respecting the probable advantages to be derived from further experiments.* By Edward Jenner, M.D., LL.D., F.R.S., M.N.I.F. etc., and Physician to the King. London: 1822. 4to, pp. 68.

REASONS AGAINST VACCINATION FROM NEW ENGLAND.

PERMIT me to say why I do not believe in vaccination. It is because prominent members of the medical-school-theory upon which vaccination was invented and is based have long since rejected its use; because its defenders cannot show that it contains any element of scientific truth; because no man has sufficient knowledge of those conditions upon which the development of small-pox depends to justify its practice; because no man has sufficient knowledge of the effects which vaccination produces to justify its practice; because experience and statistics can prove nothing in favour of vaccination when they pertain to and are so fully influenced by the unknown workings of nature; because the vaccinated would, were they long exposed to similar conditions, be just as susceptible to small-pox as are the unvaccinated; because there are thousands and thousands of sensible people who dread vaccination either from its injurious effects upon themselves, their children, or their friends; because thousands and thousands of honest people have had small-pox who had previously been vaccinated so-called successfully; because eminent philosophers, statesmen, statisticians, sanitarians, and citizens of the present day say it does not prevent small-pox; because it is the private opinion of prominent members of the Massachusetts Medical Society that it does not prevent small-pox; because it is the declaration of the London Society for the Abolition of Compulsory Vaccination that it does not prevent small-pox; because it is the avowed opinion of the American Anti-Vaccination Society that it does not prevent small-pox; and because it is the affirmation of many distinguished citizens of New England that it does not prevent small-pox. The people have been prevented from discovering the real motive of vaccination. They have been taught by physicians that the mildness and non-prevalence of small-pox are due to vaccination. Those persons who have been sick from vaccination, and have afterwards had a mild form of small-pox, have been taught by their physicians to believe that the vaccination was the cause of its mildness. Now it is very well known among physicians that the persons who have been sick from vaccination, and have afterwards had a mild form of small-pox, are just those persons who would have had a mild form of small-pox if they had not been sick from vaccination.

R. R. NOYES, M.D.

Lynn, Mass., Feb. 19, 1881.

MYSTERY OF THE VACCINATION MIRACLE.—What is that change in a living body which gives exemption from a certain disease for the remainder of life, when the individual has once passed through it? Or, yet more specifically—In what physical conditions does A, having had the small-pox, or been vaccinated, differ from himself before such protection was given, or from B who never obtained it? The question is yet unsolved.—SIR H. HOLLAND'S *Recollections of Past Life.*

OAKLAND, CALIFORNIA.

ANNUAL REPORT OF DR. WOOLSEY, HEALTH OFFICER, FOR 1880.

ANALYSED AND ABRIDGED BY H. D. DUDGEON.

DEATH-RATE, nearly 13 per 1,000 of population.

Birth-rate—of the two healthiest wards, 19 per 1,000 : of the two sickliest wards, 27 in the 1,000.

Population 35,000 : 21,000 being Americans : 2,000 Chinese : and the remainder English, Irish, Germans, etc. The (adult) Chinese died at eight in the thousand.

Births : Chinese, 1; American, 294; Foreigners, 304; mixed, 170. Total: 763 white, 4 black, and 1 copper—768.

Death-rate from zymotics, 217 per 100,000 of population, being one half less than the death-rate from these diseases in New York, Boston, Cincinnati, and Chicago.

The principal factor concerned in the production of most zymotic diseases is not climate but *filth ;* and the quantity of filth in a city may be estimated by its death-rate from diseases of this class. The occurrence of typhoid fever in certain sections of the city admonishes that the evil of uncleanliness is still lurking : bad drainage, defective sewage, crowded habitations with dark inside sleeping-rooms, the drinking of surface well-water, etc. The contamination of the atmosphere within a limited range of the water-front by the prevailing wind from the marsh land, and by the flushing of the sewers *in the wrong direction* by every inflowing tide, fairly explains the obvious relation between the most unhealthy localities and the filthy accumulations at the outlet of our sewers. All things being equal, the greatest mortality from zymotic diseases will of course occur where small children are most numerous—where there is the most susceptible material. But things sanitary are never equal ; and it will be found not only that the highest proportionate mortality from zymotic diseases will occur in the most filthy localities, but that sunshine and pure air are especially favourable to health and longevity.

A portion of each day is spent by the Inspector in systematic house-to-house inspections of neighbourhoods in which nuisances were reported or suspected. Accurate memoranda of the sewage facilities, water supply, and sanitary conditions of premises visited, were made on the spot, and afterwards recorded in a book. This will be a valuable record. The American Public Health Association in December last, declared that a person proposing to buy or rent a dwelling-house ought to be able on payment of a fee, to obtain from the health officer a certified copy of the sanitary history of the house he proposes to occupy, its connection with sewers, and the number and causes of the deaths that have occurred in it, or in the square in which it is situated.

The mortality of children under five was less than one-eighth of the total, which is a splendid showing.

The smallest number of zymotic deaths occurred in April, when the gutters were washed and the sewers flushed by the heavy rains.

It is to local sanitary conditions that we must look for explanations of the origin and propagation of zymotic diseases.

It is the rule here that the colder the weather the greater the mortality ; our dry summers are healthier than our wet winters, in which lung and bronchial diseases prevail.

The prevalent crime of living and sleeping in ill-ventilated apartments is more deadly than the vice of intemperance. In our Oakland winters, fires for personal comfort may be altogether dispensed with at the expense of good ventilation. The practice prevails in winter time, even in the best society, of warming sitting-rooms and bed-chambers with foul air ; shutting out oxygen on the one hand, and substituting expired breath for wood and coal on the other.

Here and elsewhere about nine-tenths of all diarrhœal diseases occur to children under five.

The ventilation of our street sewers is an urgent requirement, for at present the principal escape of the fetid and noxious gases is through the ordinary house-traps into sleeping rooms.

The establishment of a system for the removal of garbage from streets and houses—so greatly needed and so long neglected—is already under consideration, and will probably, in the course of a few months, be accomplished.

We are of opinion that the primitive privy-vault and cesspool, the relic of a semi-barbarous age, should not be permitted to become fixtures or be tolerated in any enlightened community.

The well-water is always more or less contaminated. The most impure water analysed was from a well 26 feet deep, and 30 feet from an open privy-vault. The water was quite clear and odourless, and was pronounced by those who were supposed to drink it to be of good quality. It nevertheless contained an unusually large amount of organic matter which in all probability had come from the privy.

The foregoing abstract from the Californian Report may be fitly ended with an account of the small-pox epidemic of last summer therein contained. Seven hundred and ten Chinese were congregated under one roof and in one boarding-house; they worked at the jute mills. A case of small-pox, imported from China, was made known among them on the 27th July. The Board has absolute control over Chinamen. The place was quarantined day and night by armed guards, and no one was permitted to leave. Every Chinaman was vaccinated (710 in number), and all those in whom the first experiment failed (110 in number) were re-vaccinated. "A most excellent opportunity was thus offered for obtaining accurate statistical information. . . . The facts are completely at variance with the old idea that the protective influence of vaccination will last for seven years, and tend to show the fallacy of the prevailing opinion that an attack of small-pox will bring to the individual subsequent immunity from the disease." The virus used was bovine lymph of the best quality that could be procured. The disease appeared in many different sections of the city from August to December 13th. Special policemen were placed as guards at infected houses, and the disease in no single instance spread from an infected house. Among the 710 Chinese there were seven cases, and two died. Fourteen cases occurred in various parts of the city with two deaths. Total, 21 cases and 4 deaths : being nineteen per cent. of cases. Among the Chinamen we are told that the second case "broke out" before vaccination had taken effect. The next confluent case "broke out" about the time that vaccination began to act, and the other three cases of August 10th "broke out" during the development of vaccination. The last of the seven Chinese cases "broke

out" during the desiccation of the vaccine pustule. [The Report places the words "broke out" between inverted commas.] In all of the last four cases referred to, *the eruption of the disease was thicker at the site of vaccination than elsewhere on the body.*

Of the fourteen cases among the white population, twelve had been vaccinated, of whom one died; the other death occurred in an unvaccinated infant four-and-a-half months old. One case was of a person who had been inoculated: two of the patients had been vaccinated within the last six years. Four of the cases occurred in persons under the influence of vaccination.

It appears from the Report that all the 710 Chinamen were vaccinated. If this be so, the Chinaman who first fell ill and who died, was vaccinated during his illness. On this point the Report is not quite clear.

MR. ERNEST HART TESTIFIES.

DR. RENNER, the Paddington Calf Lympher, having written to the *British Medical Journal*, 4th June, stating how many of his patients are successfully re-vaccinated, proving thereby that their primary vaccination had worn out, Mr. Ernest Hart thereon delivers himself as follows—

"Our soldiers, sailors, postmen, small-pox nurses, all of whom are re-vaccinated, enjoy an almost absolute immunity from small-pox, even during epidemic periods, and when surrounded with disease. The like immunity may be obtained by every rational member of the community who chooses to submit himself after the age of fifteen to re-vaccination. The present epidemic of small-pox is a lamentable monument of human folly and neglect, which leave out of view a harmless and necessary precaution against so fatal and loathsome a disease. The responsibility of the misguided persons who seek to deter from obtaining this protection is great indeed; and it is difficult to use words of moderation in viewing all the fanatical ignorance and obstinate preversion of the truth of the facts with which they stimulate and maintain their reckless and mischievous crusade."

If "fanatical ignorance and obstinate perversion of the truth of the facts" are words of moderation, what might words of immoderation be? Yet the words, such as they are, accurately describe Mr. Ernest Hart's own advocacy—supposing it to be sincere; for we have heard it doubted whether he has been re-vaccinated himself; with the additional observation, that he was not fool enough to follow his own prescription. We trust for the credit of human nature that there is no warrant for the insinuation.

COMPULSION FOR EVER!—At a meeting of the City Commissioners of Sewers it was recommended to urge the Local Government Board to have an Act passed to enlarge the powers of the Asylums Board; and in the same Act to include provisions for *the compulsory notification of infectious diseases*, and *the compulsory removal to hospitals of persons suffering from such diseases.*

LONDON SMALL-POX.

(To the Editor of the Times.)

SIR,—Whilst many notices have appeared in the press of the diminished death-rate in London during the last decade, from zymotic diseases, as recorded in the recently issued Annual Summary of the Registrar-General, the other side of the picture, the *increased* mortality from small-pox, appears to have passed altogether unnoticed. On page xx. we find the small-pox mortality of London for the last forty years tabulated as follows:—

Decades.	Estimated Mean Population.	Small-Pox Deaths.
1841-50	2,103,487	8,416
1851-60	2,570,489	7,150
1861-70	3,018,193	8,347
1871-80	3,466,486	15,543

These facts, Sir, coupled with the additional one that during the twenty-one weeks ending 28th May, 1272 persons have died in London of small-pox, 327 of whom were under five years of age, appear to me to be utterly subversive of the pretensions of vaccination. It is absurd to say in the face of these returns, that vaccination has saved thousands of lives, or that the mortality would have been greater if 95 per cent. had not been vaccinated, or that the deaths accrue from the "unvaccinated residuum," as Dr. W. B. Carpenter would have us believe, seeing that in the first decade when but few, comparatively, were vaccinated the mortality was only about half as great as in the last when 95 per cent. had received the so-called *protection* of vaccination. WM. YOUNG, M.P.S.

114 Victoria St., 11th June, 1881.

Abstract relative to Small-Pox Mortality in London for the year 1880, from the Annual Summary of Births, Deaths, and Causes of Death, issued from the office of the Registrar-General, April 30th, 1881.

Diminution of Total Mortality.

"The decennium which closed with the year 1880 was one of lower mortality in London than any of the preceding decennial periods, for which trustworthy data are forthcoming." (page vi.)

Increase of Small-Pox Mortality.

"One disease alone in the class (zymotic) showed exceptionally a rise, and no inconsiderable one. This was small-pox, which, owing to the two great outbreaks of 1871-2 and 1877-8, gave a death-rate nearly 50 per cent. above the previous average. Doubtless there will be persons who will find in this fact a support of their opinion as to the uselessness of vaccination; but to most minds the truer lesson will appear to be, the necessity of enforcing vaccination with greater rigour, and with greater security for its efficiency." (page vii.)

Influence of Temperature on Small-Pox Mortality.

"It may be concluded that small-pox not only kills more persons, but attacks more per-

sons, in winter than in summer." (page xi.) This is confirmatory of the view held by Dr. Carl Spinzig, who states—"Small-pox appertains to that class of diseases which prevail in the wintry season, when from the intensity of the variations of meteorological influences, an epidemic prevalence results."

Deaths registered in London in several groups of ages from small-pox during the 52 weeks, ending 1st January, 1881.

	All Ages.	0 to 1 yr.	1 to 5 yrs.	5 to 20	20 to 40	40 to 60	60 to 80
Vaccinated,	104	1	9	20	58	16	—
Unvaccinated,	229	28	51	87	45	17	1
Not stated,	142	29	20	34	34	20	5
Totals,	475	58	80	141	137	53	6

Small-pox Deaths in London in each year since 1841, in periods of ten years each.

1841,	1053	1851, 1062	1861, 217	1871,	7912
1842,	360	1852, 1159	1862, 366	1872,	1786
1843,	438	1853, 211	1863, 1996	1873,	113
1844,	1804	1854, 694	1864, 547	1874,	57
1845,	909	1855, 1039	1865, 640	1875,	46
1846,	257	1856, 531	1866, 1391	1876,	736
1847,	955	1857, 156	1867, 1345	1877,	2551
1848,	1620	1858, 242	1868, 597	1878,	1417
1849,	521	1859, 1158	1869, 275	1879,	450
1850,	499	1860, 898	1870, 973	1880,	475
	8,416	7,150	8,347		15,543

WM. YOUNG.

VACCINATION IN HACKNEY.

THROUGH Dr. Pearce's activity and the publicity afforded by the *Hackney Standard*, an extraordinary interest has been excited in the vaccination question throughout that large and populous borough. The great meeting in Dr. Seddon's Tabernacle has been followed by another in Morley Hall, at which the opponents of vaccination have had it "all their own way"—the resistance being overpowered by sheer force of evidence. This we may say of vaccination—it can nowhere endure discussion, either in public meetings or in the press. Courteous as he is, vaccinators fare badly under Dr. Pearce's hands, and it is not matter for surprise that medical men who look in at his meetings maintain a judicious silence.

DONE TWELVE TIMES!—We had supposed Dr. Lionel Beale to be the most vaccinated man in London, but it appears that Mr. Marsham, the magistrate at the Greenwich Police Court, runs him hard. Having Mr. Foster Howe of Lee before him for refusing to have his child vaccinated, he assumed to defend the practice, saying, "the enormous proportion of the unvaccinated who die proves that not sanitation, but vaccination is our true security from the disease. I have myself been vaccinated about twelve times, and I should be again next year if small-pox were about."—If so much vaccination be requisite for safety, many will argue that the protection is more to be dreaded than the penalty. The *Lancet* says a single re-vaccination is sufficient for life; and if so, is it not somewhat hard that faithful creatures like Mr. Marsham should be so imposed upon?

WHO ARE THE UNVACCINATED?

THE following letter appeared in the *Manchester Examiner and Times*—

"In Dr. Buchanan's 'Memorandum on Small-pox,' the following passage occurs: 'As no one suggests that the vaccinated and unvaccinated classes live under conditions differing from each other in their influence on small-pox, unless it be this one condition of vaccination, it follows for a first inference that the vaccinated are much less liable to die of small-pox than the unvaccinated.' The expression 'As no one suggests' is not quite honest in its character. The main instruction given to the public vaccinators connected with the department of which Dr. Buchanan is the head is as follows: 'Vaccinate only subjects who are in good health.' Mr. John Simon, C.B., F.R.S., for many years the chief medical adviser of the Government, as Dr. Buchanan is now, said in his evidence before a Parliamentary Committee in 1871, in answer to Question 3098: 'But let it be considered, with particular reference to that child who so shows a special liability to be upset by vaccination, what an infinitely greater upset small-pox would be. If the minimised disturbance, if the minimised small-pox, which vaccination is, produces this temporary derangement of health, what would not natural small-pox do to the child?' and in a report issued by Dr. Dixon, medical officer of health for Bermondsey, referred to by Mr. Ernest Hart, in the *British Medical Journal* of October 23rd, 1880, as an 'excellent report,' occurs the following: 'The high death rate in the unvaccinated must not be compared with the lower rate in the vaccinated, nor with the general mortality from small-pox before the discovery of vaccination, without a fair consideration of all the facts which may help to arrive at a just conclusion. There is a great difference in the intensity and virulence of different epidemics, both in small-pox, and in other zymotic diseases. It is probable that a large proportion of unvaccinated persons is to be found among the ignorant, dirty, and wretched inhabitants of the slums of London, and very few indeed, among the educated and better fed members of society. The disease is much intensified by overcrowding.' To those persons who are familiar with the one-sided statements issued by Government officials to bolster up a 'diseased' remedy, the want of candour, to use a mild expression, in Dr. Buchanan's statement will be nothing new. But it is hardly fair that public money should be used to diffuse misleading information.

"ENOCH ROBINSON, Surgeon.

"Chapel Hill, Dukinfield, June 18th."

THE following letter appeared in the *Times* of June 20th:—

"Assuming for the moment that it is possible to discriminate with any sufficient amount of scientific accuracy between the vaccinated and the unvaccinated who die in the hospitals of small-pox—which, however, there is high medical authority for denying—there yet re-

mains a patent fallacy in Dr. Buchanan's conclusions, which entirely deprives them of all value. Dr. Buchanan starts with the remarkable premiss: 'No one suggests that the vaccinated and unvaccinated classes live under conditions differing from each other in their influence on small-pox, unless it be this one condition of vaccination.'

"The inaccuracy of this assertion has been repeatedly exposed, but it is so obvious that one is surprised that any person in the least conversant with the subject could have fallen into it. It is manifest that the *unvaccinated* remnant of the community must be expected to show a much higher rate of mortality from any epidemic that may prevail, because they consist of (1) children in so bad a state of health that the doctors dare not vaccinate them; and (2) of children living in the slums of London where medical activity is slow to reach them, suffering under every predisposition to disease, caused by unhealthy dwellings, and by every other insanitary condition; while, as is well-known, vaccination is almost universal amongst the middle and higher classes, whose habits and surroundings are, of course, such as minimise the danger of infection, and secure every chance of recovery.

"It follows, therefore, that those who have no faith in vaccination as a factor in small-pox mortality would naturally anticipate that the unvaccinated of our population would suffer in any small-pox epidemic, much about the same as did the whole population in the last century, when probably the sanitary, or rather unsanitary conditions of all London were about on a par with those of our existing worse localities. Such anticipation is curiously confirmed by Dr. Buchanan's figures. Dr. Buchanan places the mortality of what he considers the unprotected part of the population in the present epidemic at 3350 per million living, which is in curious harmony with the mortality in London during the small-pox epidemics of the last century—the total mortality by that disease of the twelve worst years of the century being 88,827, giving an average of 3235 in a population I believe generally estimated at about one million. P. A. TAYLOR.

House of Commons, June 15th, 1881."

OF COURSE!—According to Dr. Fisher, the old lady at Sittingbourne who was re-vaccinated and died, did not die in consequence of his operation. Not only had the erysipelas no connection with the spot where the vaccine lymph was inserted, but the vaccination failed. Just so! Some of the worst cases of blood-poisoning are failures in the vaccinator's sense.

A BIT OF EXPERIENCE.—Mr. Charles Hanks, of Cullerton Place, Newcastle, writing to the *Tyneside Echo* of 15th June, says—"I had my two eldest children vaccinated, and some time afterwards they broke out with running sores and were under the care of the doctor for six months, who told me they were suffering from the effects of vaccination. Nine years this summer small-pox was raging badly in London. My brother, like hundreds more, was vaccinated (effectually, as the faculty would say). Six weeks afterwards he took small-pox, which caused his death, at the age of twenty-two."

"FULL AND EXHAUSTIVE INQUIRY."

THE letters which follow have a little history which may interest the readers of the *Inquirer*. In 1869, my brother Richard having arranged to address a meeting at Bradford, the *Bradford Observer* published a leading article on the day of meeting, in which it was argued to be absurd for Mr. Gibbs to try to upset a law which had been made only after an exhaustive inquiry into the merits of the practice. In the course of his speech my brother referred to this, and said he supposed the editor must allude to Mr. Simon's "papers," since so well known; but as these were published in 1856 they could not have formed the basis of an Act passed in 1853. The next day the editor in another article stated that he did not refer to Mr. Simon's "papers," and re-asserted that legislation had been preceded by inquiry. The letters tell the rest.

GEORGE S. GIBBS.

R. B. GIBBS TO LORD LYTTELTON.

July 24th, 1869.

My Lord,—The recent controversies respecting the Vaccination Laws have led to a reference to a "full and exhaustive inquiry into the value of vaccination" previous to the introduction by your Lordship of the Vaccination Bill in the House of Lords in 1853. As we are anxious to gather all the information possible on this important subject, I trust your Lordship will pardon the intrusion if I ask what was the nature of the information or data on which your Lordship's Bill of 1853 was founded?—I have the honour to be, etc., R. B. GIBBS.

LORD LYTTELTON TO R. B. GIBBS.

Hagley, Stourbridge, 28th July, 1869.

Sir,—Your note arrived this morning. I regret I have no special information to give you. The expediency of making vaccination universal I took, as I believed, on common notoriety, and the medical authorities I chiefly consulted were Dr. Seaton and Dr. Marson.—Yours obediently, LYTTELTON.

DR. B. W. RICHARDSON wishes it to be understood that he has no sympathy with opposition to vaccination. He writes to Mr. Roberts of Keighley—"I have been re-vaccinated four times myself, and all my family have been re-vaccinated, and we are about to be put through the vaccination again. These are, I hope, sufficient evidences of the views I hold, and I do not know how any rumour contrary to them has got abroad."—What Dr. Richardson objects to is the use of the policeman in enforcing vaccination.

WHAT IS REASONABLE EXCUSE?—The Vaccination Act provides that reasonable excuse be heard for not obeying the law, but what is reasonable excuse is undefined, and is subject for continual controversy. Mr. George Kidson recently appeared for several friends under prosecution at Royton, and was told that neither disbelief in vaccination, nor evidence as to injuries inflicted by the practice was reasonable excuse; yet what excuse could be more cogent and reasonable? Mr. Kidson had a hard struggle to obtain a hearing, and was compelled to address the bench in severe terms. Magistrates ought to know that parents are entitled to be heard by whoever they please to appoint as their representative, and that they are bound to listen to argument before pronouncing judgment.

ANTI-VACCINATION PIONEERS.

Mr. George S. Gibbs, of Darlington, was the last delegate to arrive. Some of you know that he is one of the earliest and oldest advocates of our cause. For a quarter of a century he has resolutely opposed the domination of the medical priesthood, which like the religious priesthood of an earlier epoch, has so cunningly and selfishly sought to crush out parental rights, and choke the liberties of the nation. His admirable translations of the French Government Official Vaccination Returns, and his excellent publications, have made his name known to all the earlier, and many of the later friends of the cause. It was my privilege, therefore, on his arrival at the Conference, to introduce him to the assembled delegates, as the *doyen* of the English Anti-Vaccinators, and I need scarcely say, that his welcome was of the heartiest description. It is not too much to say that to Mr. George S. Gibbs, of Darlington, and to his relatives, the late John Gibbs and Richard Butler Gibbs, who by their faithful persistency, have kept alive this movement in England against the contempt and scorn and indifference of almost the entire nation, is due the fact that it now exerts so potent an influence on public opinion and on parliament, that to use the words of Mr. Ernest Hart, "fills the entire medical profession with alarm and regret." Had it not been for this fidelity to human rights, and this resistance to medical intolerance, at this the beginning of our agitation—I doubt if this International opposition would have been possible. Mr. George S. Gibbs maintains with unshaken determination the truth of his conviction, and holds an abiding faith in the ultimate triumph of truth over falsehood, and righteousness over cruelty and injustice. And it has been said by a high authority that there is no greater injustice than that which is committed in the name of the law.

Another veteran in the movement is Dr. Adolf Vogt, Professor of Medicine in the University of Berne, a delegate from Switzerland, who was elected Vice President of the Paris Congress. Dr. Vogt is a man of European reputation, and is known through his writings to every student of sanitary science. Having occupied a prominent position in the medical world for thirty-two years, and a distinguished position for more than half that time, his testimony at the Congress was doubly valuable. He asks where can be found a scientific authorisation for forcing a surgical operation upon the people, an act to which he says the State attaches the same importance, that it does to the act of birth, marriage, and death, or that the Church attributes to the seven sacraments. Dr. Vogt showed by historic evidence that small-pox had increased as vaccination had been enforced in Sweden, Prussia, Germany, and England during the past thirty years; that small-pox had begun to decline at the beginning of this century, and before Jenner had even announced his discovery; that the epidemics throughout Europe from 1868 to 1874, after almost universal vaccination, were not surpassed in intensity by any of those of the last century. He looked upon vaccination in preventing small-pox epidemics in the same light that he regarded epigastric bandages as a prevention of cholera, or the paper amulets worn by the soldiers of Lamoricière at Meroda and Ancona as a protection against the bullets of the enemy.—*From Mr. W. Tebb's Address on the International Anti-Vaccination Congress at Paris.*

WHATEVER HAPPENS MAKES FOR VACCINATION.

A few days ago a navvy on the Great Northern works at Leicester, who slept at a lodging-house in the poorest part of the town, was sent to the small-pox hospital and is dead. According to state-medical hypothesis, myriads of living small-pox germs remain in full vigour, seeking whom they may devour among the thousands of unvaccinated burgesses and the hundred thousand of people whose vaccine protection has expired by lapse of time. If the contagion spreads rapidly, it will be a proof of vaccination theories, as showing the small-pox to be a highly contagious disease; if it spreads slightly, it will equally be a proof of vaccination theories, as showing the modifying power of vaccination in a community; and if it does not spread at all, it will be an undeniable proof of vaccinating theories, and of the power of the cow-pox in rendering the contagious "germs" harmless. Everything that *can* happen, everything that *does* happen, and everything that *does not* happen, are alike proofs of vaccination.

Eight or ten years ago one of the doctors at a London small-pox hospital was seized with fever. I do not agree with the doctrine that the zymotic diseases are *specific*, and to this extent I am with Dr. Carpenter. *Ergo*, one zymotic patient may in some cases infect another person with a zymotic disease, to which a different name may be attached by the maintainers of specificity; the infection being either by inoculation or by too close an approach to the patient.

H. D. D.

Mr. Thomas Burt, M.P.—The case against Mr. Burt for refusing to have his child, Wilfrid, vaccinated, was heard at Newcastle on 14th June. Mrs. Burt appeared for her husband, who was absent in London, and admitted the charge. A fine of 20s. was inflicted, and the magistrate suggested that Mrs. Burt should read the evidence recently published, showing the great liability of unvaccinated persons to small-pox. The advice was superfluous, as Mrs. Burt is familiar with the evidence and knows its worthlessness.

A Nice Investment.—We have received the prospectus of The Calf Vaccine Lymph Co., capital £10,000 in shares of £1 each. It is said, "This Company has been formed for the supply of Vaccine Lymph directly from the Calf, as originally advocated by the discoverer of Vaccination, Dr. William Jenner." If the lymph is no better than the biography, it will be mixed indeed! The jumble of Edward Jenner with Sir William Jenner is piquant in the extreme. Lymph at 2s. per tube may be had of the Medical Superintendent, 4 Agar Street, Strand.

ON VARIOLA.

By Dr. Carl Spinzig, of St. Louis, U.S.A.

This work has appeared at a time when its teachings are much wanted, and must exercise corresponding influence. The views of the author are both novel and well thought out, full of fresh original matter and patient research; and, withal, showing much study of the works, and respect for the experiences, of others.

Dr. Spinzig does not believe in the existence of any peculiar or specific infection in the case of small-pox; and even quotes the statements of distinguished French and German microscopists to the effect that the minute examination of vaccine and variolous matter shows these two substances to have, in the specimens examined, absolute microscopical identity in all essential characters. Even under spectroscopic examination no essential difference was observed,—a result which is likely enough when the one substance has been deliberately produced by inoculating calves or heifers with the other.

According to Dr. Spinzig, variola belongs to the class of septic diseases; and may be produced, *de novo*, whenever a special set of conditions exists. These conditions are partly within the body and partly without, and are especially likely to occur in connection with insanitary surroundings, and amongst an ill-fed, ill-clothed, and dirty population.

Dr. Spinzig's work is valuable, both from a statistical and a scientific point of view; but it has not been done full justice to in the editing; having apparently been translated from German into English. Making every allowance for the anxiety of the editor to have the work early before the public, I am bound, in candour, to admit that a resumé, more carefully printed and edited, would be more likely to circulate freely amongst English readers than the work in its present form. With all these drawbacks, however, we on this side of the water welcome the volume as one of the ablest contributions yet issued in connection with variola and vaccination. The view the author takes respecting the identity of variola and vaccinia is, no doubt, contradicted by the recent report of the Belgian Commissioners of the Academy of Medicine; but he certainly gives high authorities in support of his own view, which seems likely to modify our conceptions of so-called "specific poisons" occurring in the course of "regressive metamorphosis," such as takes place in morbid changes in the human body.

The boldness of the author's position can be readily perceived by a single quotation; which is set down with the utmost deliberation, as the logical outcome of the propositions and statistics previously advanced. He says, when speaking of the septic character of vaccine virus and its pathological relation to tuberculous deposits, "The imminent danger of permanently injuring health, and of bringing life into early peril, arising from vaccination, must thus be fully apparent; if yet its practice is insisted on it cannot be considered as anything else than *a wilful crime, and should certainly be liable to the same penalties as all other criminal practices against life.*" The logic of the learned Doctor is so pitiless that he does not leave the conscientious vaccinator a solitary rag to cleave to either on the ground of experience, reason, or scientific possibility. Henceforth let us plainly tell our opponents that however much we may have hitherto shrunk from condemning the practice of private vaccination amongst those who are able to judge for themselves, we now no longer give an uncertain sound. There are, no doubt, amongst them men of great intelligence, vast learning, and high moral character; but this only renders it more necessary to bring persistently before them the evidence on which our own judgment has been based. The whole quackery must be cut down, root and branch, with all the unclean birds that have hitherto so comfortably nestled beneath the shade of its profitable branches.

Edward Haughton, M.D.

12th May, 1881.

Drag 'em off to the Hospital!—At a meeting of the Metropolitan Asylums Board, Mr. Proudfoot said they would never be able to strike at the root of the evil until they were empowered to remove every case of infectious disease to an hospital as soon as discovered.

The Icelanders.—J. C. J. reminds us that "the Icelanders have been emigrating to Manitoba, as many as 1500 leaving in one year; and that in the *Agricultural Gazette*, 22nd October, 1877, it is stated that in Manitoba they 'were decimated by small-pox, the mortality being chiefly among the young.' It is the old story—the nearer the protection of vaccination the greater the mortality. The most important question, however, remains. How did small-pox get into Iceland and into Manitoba? Did it originate in the pre-adamite germ of Dr. Lionel Beale?"

Ordinary Vaccination Condemned. — Mr. Arthur Roberts, Medical Officer of Health, Keighley, writing to the *Keighley News* of 18th June, says—"I have just vaccinated my youngest child, and re-vaccinated myself, and if there is any fear of an out-break of small-pox, I shall re-vaccinate the whole household. I always vaccinate with calf-lymph, never from arm to arm, because I believe that vaccination from arm to arm exhausts the strength of the lymph, and consequently the protection against small-pox becomes less and less, until at last vaccinations done with such lymph are very little protection." It is not much to the credit of Mr. Roberts that he should live in the light of Keighley and remain so foolish. Yet he entertains opinions about vaccination, widely at variance with accepted practice, which Dr. Buchanan and Dr. Stevens would regard as scarcely less mischievous than those of the Keighley Guardians themselves. Mr. Roberts ought, also, to remember that in his depreciation of arm-to-arm vaccination, he is at complete variance with Dr. Warlomont of Brussels, the chief of Calf-Lymphers. In a letter to the *British Medical Journal* of 18th June, he says, "Calf-lymph and human-lymph are considered of equal value as preservatives against the small-pox—*with only this difference:* that animal lymph has the advantage over human lymph of offering to families an absolute guarantee against the transmission of disease from one human being to another." It is right enough that Mr. Roberts should hold his own opinion, but he is in no position to rebuke others for singularity.

MR. DODSON ABUSED.

MR. DODSON should rebel, and inform his medical advisers that he can no longer be the mouthpiece of their fables in the House of Commons. Imagine the honest man put up to reply to Mr. Hopwood's question whether there was not a large quantity of variolous lymph in use, and saying that if by variolous lymph was meant matter capable of producing small-pox, there was no such matter used under the Vaccination Acts! adding that he was informed that all attempts of late years to inoculate cattle with small-pox had proved abortive. It seems true that there is nothing like audacity. The recent outcry of the Calf-Lymphers over the diffusion of small-pox through the use of small-pox inoculated on cattle by Ceely and Badcock was taken as forgotten! The fact is notorious, and it avails nothing to be informed that the successes of Ceely and Badcock have not recently been repeated. The virus raised by them on cows from small-pox is in general circulation, and no vaccinator who uses the national stock can tell which is Ceely's and which is Jenner's. But to place the matter beyond dispute let us turn to the Report of the Parliamentary Committee of 1871, p. 248, Question 4325, where we shall find that Mr. Candlish asked, "What is the source from which you derive vaccine lymph?" and that Mr. Marson, Marks Marson, replied, "I have two sources now in use; one obtained from the cow by inoculating the cow with human small-pox; the other source being a cow which had the disease in a natural way, in the neighbourhood of Brussels, about two years ago."

VACCINATION PROSECUTIONS. — Mr. Courtney, M.P., has moved for an amended Return of the number of persons who have been imprisoned or fined for non-compliance with the Vaccination Act. It is to be hoped that this new Return will make some approach to fulness and accuracy. The previous Returns were worthless.

A FORECAST OF SANITARY TRUTH.—God no more makes whole nations of men jealous, envious, malignant, eager to surpass each other, ambitious, conquerors, cannibals,—than He forms nations continually labouring under leprosy, purples, fever, or *small-pox*. If you meet an individual subject to these physical evils, *impute them without hesitation* to some unwholesome condition in which he lives, or to a putrid air which infects the neighbourhood.—ST. PIERRE'S *Arcadia*.

CATTLE PLAGUE AND COW-POX.—Dr. Cameron, M.P., refers to Mr. Ceely who obtained vaccinia from small-poxed heifers; as did also Mr. Badcock and Sir Cordy Burrows; the small-pox being, as was said, filtered through the cow and made harmless! Dr. Cameron, however, overlooks Mr. Ceely's report on the case of Mr. Henry Hancock of Uxbridge, who was accidentally punctured while superintending the autopsy of a bullock dead of cattle-plague, whereby a genuine vaccine vesicle was produced on Hancock's hand. It is said that Mr. Ceely changed his name, but if he did the chromo-lithograph he published to illustrate the case remains to attest his original accuracy. I gave the pamphlet with the coloured picture of Hancock's hand to a lady, who showed it to her husband, who was so sickened with the sight that he could not eat his dinner.—J. C. J.

PROGRESS IN NEW ENGLAND.

DR. ALEXANDER WILDER of New York writes to Mr. Tebb:—"I visited the city of Hartford on 10th May to be present at the meeting of the Connecticut Eclectic Medical Association, and had a cordial reception. To my great gratification, and not a little to my surprise, I found several decided anti-vaccinators, and many whose confidence in the established preventive had been badly shaken. There did not seem to be one real believer in vaccination in the hall; several were favourable but distrustful. The out-going president, Dr. L. S. Ludington of New Britain, Connecticut, a veteran, announced himself as one whose faith had been shaken; while the new president, Dr. Ripley, was an outspoken adversary. So too was Dr. S. B. Munn of Waterbury, former president of our National Medical Association. It was voted to hold a semi-annual meeting at New Haven in November, at which papers and discussions on vaccination should be the principal topic. In our United States Medical College, the president, the leading trustees and professors are, as you already know, pronounced in hostility to the blood-poisoning practice."

WHY SO FAITHLESS?—We read in the *Daily News*—"CORFU, 18th June. The British Fleet under Admiral Seymour has passed this island. It did not stop here on account of small-pox."—Yet all the men, vaccinated and re-vaccinated, were as secure from small-pox as hospital nurses! Why so faithless?

DEATH FROM VACCINATION.—A child named Florence Maud Woodley, four months old, was vaccinated a week ago at the public station at Plymouth, and proceeded favourably until Thursday, when the arm became inflamed, and the child expired yesterday morning. At the inquest held last evening, independent medical testimony was given to the effect that the child, a strong one from birth, had died from exhaustion, indirectly produced by vaccination. The jury returned a verdict accordingly.—*Daily Telegraph*, 18th June.

THE first Conference of the London Society in their new room, 114 Victoria Street, Westminster, was held on Wednesday evening, 22nd June. Mr. Tebb occupied the chair, and Dr. Pearce read a paper on the past, present, and future of the movement against vaccination. Dr. Pearce's reminiscences of the early days of the agitation were especially interesting, and must not be forgotten. It is our habit to think so much of our own activity and success that we are apt to forget the past whereby our position has become possible. The Society's room is well adapted for an audience of about a hundred, and the Conferences afford excellent opportunity for inquiry and discussion.

IN PROSPECT.—Dr. Cameron has given notice that he will call attention to the lack of capacity and resource of the Local Government Board in dealing with the existing small-pox epidemic in London, and has secured Friday, 8th July, for his motion. Mr. P. A. Taylor will move an amendment, and it is hoped that our friends will urge members, over whom they have influence, to support Mr. Taylor on the occasion.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 29.] AUGUST, 1881. [Price 1d.

NOTES OF THE MONTH.

"Murder Leagues!" Thus Mr. J. G. Talbot, M.P. for Oxford University, stigmatises associations that oppose vaccination. It is not for us to be surprised if what we assert of our antagonists is asserted of ourselves. We not only maintain that vaccination does not prevent small-pox, but that it is the immediate cause of the death of thousands of children, and of numberless ailments in those who survive the superstitious rite; and we prove our assertion by the undisputed evidence of the Registrar General, and especially by such Parliamentary Returns as Vaccination Mortality, No. 433, 1877, and Mortality, General and Infant, No. 76, 1880. Those concerned in the administration of the Vaccination Acts are well aware that vaccination has its price in disease and death; and the most they say for it is, that the price is less than that of small-pox—an assertion we dispute. It was no anti-vaccinator, but Mr. J. W. Pease, M.P. for South Durham, who, in the House of Commons in 1877, appealing to Mr. Sclater-Booth, said, "The President of the Local Government Board cannot deny that children die under the operation of the Vaccination Acts in a wholesale way"—nor was denial attempted. Even if vaccination prevented small-pox, we should say the prevention was more deadly than the malady; and that we had better accept small-pox on the same terms as other forms of zymotic disease, doing what we could by sanitary measures to avert its occurrence and by rational treatment to mitigate its consequences. As for imputations of murder, they are not to be commended on either side; but the question is not one easily argued in scrupulous phraseology, nor do we care to give or to ask for quarter. The Metropolitan Asylums Board, of which Mr. Talbot is a representative, are not remarkable for intelligence. Small-pox is an annoyance and a reproach to them, and as is common with vulgar and unscientific observers, they are ready to snatch at any excuse that accounts for its persistence. Their medical officers, perceiving what is wanted, provide the extraordinary statistics with which the public are from time to time horrified — Surgeon-General Bostock being the last contributor to the Board's course of sensational fables; he picking out 98 children, said to have been unvaccinated, at the Stockwell Hospital, and showing that 42 died! See, say the Board, and see, say the newspapers, what happens when vaccination is neglected! Presently some one will surpass Bostock with more outrageous figures, and then perhaps the valiant Talbot will demand that "Murder Leagues" be suppressed by the police, and their officers dragged to prison for inciting to rebellion against the law of the land.

Dr. W. B. Carpenter in the *Modern Review* resumes his defence of the medical profession, with which we are not further concerned than to observe, that he repeats his statements concerning the efficacy of vaccination as if by repetition they were to be proved true. What we say is, that the statements have been shown to be untrue, and that no attempt is made to counteract their exposure. What can be said, for instance, of a man who maintains that the death-rate of the unvaccinated at this day is 44 per cent., when the death-rate a century ago was 18 per cent., and who re-asserts the absurdity with the fact under his eyes? Or, who having admitted the influence of sanitary reforms in reducing other forms of zymotic disease, allows nothing for such reforms in reducing the prevalence of small-pox, but attributes all improvement to vaccination? Men like Dr. Buchanan to whom vaccination is means of livelihood, and who apart from vaccination would be of no account whatever, may afford to commit themselves to such stupidities; but for a savant of Dr. Carpenter's pretensions, it is little short of suicidal. That he should wantonly endorse the series of trading fictions

under which vaccination is for the present carried on, and which, ere a few years are over, will be nowhere—discredited, repudiated, forgotten, is one of those mysteries which it would require his own knowledge of psychology to explain.

A MOST distressing characteristic of Dr. Carpenter's advocacy is his aptitude for fiction. Considering it requisite to prove that medical men have only a trivial pecuniary interest in vaccination, he ventures to assert that "the utmost sum ever paid out of the rates as a vaccination fee is half-a-crown,"—concealing the fact of the extra awards, and that many practitioners contrive to earn a handsome income from vaccination and from vaccination alone. Vaccination at present is a charge of £80,000 per annum on the poor rate, and this large revenue is wholly apart from private practice and payments. In short, vaccination represents a national poll-tax, and if re-vaccination could only be made fashionable and legalised, the medical revenue from the rite would be more than doubled. We do not say the profession uphold vaccination for the sake of fees, but for Dr. Carpenter to assert that fees are without influence, or are matters of indifference, is to presume over much on his readers' ignorance of human nature. But here comes the extraordinary example of Dr. Carpenter's facility at invention, surpassing even his Icelandic statistics, so extraordinary indeed that we give it verbatim, even to his own italics—

"Even if vaccinations were all performed at stated times upon infants brought to the operator, the fee would be small in comparison with what is paid for any exercise of similar skill in other professions. But as parents will often *not* bring their children to be vaccinated, the doctor has *to go to them*—a journey of miles, it may be, in a large Country Union. Further, since vaccination was made compulsory, it is the business of the Vaccinator to *search out*, from information supplied to him by the Registrar, *every child born in his district;* and he is accountable to his Board for having done so. Does the half-crown fee make it the 'interest' of a hard-worked professional man to take this trouble?"

It is almost needless to point out that in order to justify the vaccination fee of half-a-crown, Dr. Carpenter has imposed on the "hard-worked professional man" the function of the vaccination officer, otherwise the hateful spy and informer! Comment is superfluous. Dr. Carpenter has supplied us with the standard of his veracity in controversy, and we may surely be absolved from dealing with him as a serious adversary. Nothing more piquant in the way of blundering has occurred since the reviewer who ascribed the preface of Johnson's Dictionary to Dr. Latham, and then proceeded to censure Latham for his more than Johnsonian arrogance.

MR. AMOS BOOTH turned his prosecution to admirable account. He organised a procession and a public meeting of which the *Midland Free Press* observes, "Some stirring scenes have been enacted in the Market Square, but excepting at the last election, when apparently the whole of Leicester turned out to hear the declaration of the poll, never has a larger or more enthusiastic assemblage been drawn together in the locality than was the case on Monday evening, the 27th of June." Mr. Booth conducted the procession on horseback; there was a brass band, a wagonette containing an old fashioned eight-day clock seized with other furniture for Mr. Booth's fines, several vans filled with unvaccinated children, banners with mottoes, "Keep your children's blood pure," "Sanitation not vaccination," "£200,000 per annum spent on vaccination," etc., and the rear brought up with a vaccinator on a donkey. The humour of the procession was uproariously appreciated. The meeting was presided over by Councillor Wright, and the speeches were pervaded by that political good sense which is the habit of Leicester. The chairman, though disposed to think well of vaccination, held that there was nothing to be said for its compulsory infliction. Mr. Rowley pointed out how faith in the superstitious rite withdrew attention from the true causes of disease, whilst its enforcement and endowment perpetuated its existence when, like similar forms of medical error, it would otherwise perish of its own badness. Dr. Lakin, referring to the seizure of Mr. Booth's chattels, said he believed many magistrates were heartily ashamed of the law they were required to administer. Mr. Booth said it had been intended to have brought effigies of the Leicester vaccination spies to the meeting, but he had been entreated to have mercy upon them. The immense assemblage broke up with cheers for Mr. P. A. Taylor, M.P.

BEFORE Dr. Buchanan's Memorandum is forgotten and replaced by something more sensational, we would observe that whilst 1532 deaths from small-pox in twelve months is a small item in the bill of London mortality (being about one death to every 2,500 inhabitants, or,

say, six cases of small-pox in the same number) it is hardly fair to look at it in that way. London is a province covered with houses, and small-pox is by no means equally diffused over the province with six cases of small-pox and one death to every 2,500 inhabitants. There are extensive districts in London, and populations of ten, twenty, and thirty thousand without a single case of the disease; whilst on the other hand there are dense populations in certain localities in which the disease has prevailed at tenfold the rate of the assumed and illusory general average. When we are told of the ravages of small-pox among the unvaccinated, we always ask, Who are the unvaccinated? and for judicious reasons are left unanswered—the intention of those who conjure with the phrase being to lead the public to imagine that the unvaccinated are residents in comfortable houses who have been beguiled by the fallacies of anti-vaccinists, and have been overtaken and slain in their unwarrantable security; when the fact is, that the unvaccinated in question (so far as they really are unvaccinated) consist of the very dregs of the population. In like manner we should insist on having the neighbourhoods specified in which small-pox is prevalent, and the status, occupation and habits of the sufferers defined. Were these details duly set forth, thousands of panic-stricken Londoners would recover equanimity, and cease to rush like silly sheep to the vaccinators for safety; but just because the facts would make an end of panic, they will be withheld as far as possible. Vaccination is a trade, and a thriving trade in London, and is prosecuted with all the arts of speculative and unscrupulous shopkeepers.

It is against professional etiquette for medical men to advertise or solicit custom, but under cover of the necessity of vaccination and re-vaccination, this etiquette is breaking down. A hair-dresser told us the other day that one of his medical customers had informed him that vaccination was usually charged 10s. 6d. a head in their neighbourhood, but he might let his acquaintance know that he was ready to vaccinate families with the best lymph from the calf at 8s. 6d. each, including servants. Many parts of London have been systematically visited by officers distributing the lying* pamphlet of the National Health Society with the names and addresses of medical men impressed upon it, and touting for custom with the assiduity of costermongers; whilst doctors with nimble fingers are picking up gold and silver in quarters where an outbreak of yellow fever is as probable as of small-pox. That the limits of metropolitan small-pox should be defined, and the sufferers specified, would be highly inconvenient to these panic-mongers; nor is it likely that Dr. Buchanan will do anything to mar the profitable game. As the Scots say, "Corbies dinna pike oot corbies' een."

* We use the word advisedly, and say of the compilers what Dr. Johnson said of similar imposters, "They lie, and they know they lie."

"A Regiment Empoisoned" is the heading of an article in Henri Rochefort's paper, *L'Intransigeant* of 28th June, from which we learn, on the authority of the *Petit Colon* and the Algerine journals, that on the 30th December last, the young men of the Algerine contingent of the 4th Zouaves were vaccinated by official order. Four children were made use of. Fifty-eight of the soldiers were vaccinated by the regimental doctor from a Spanish child. In a few days the whole of the fifty-eight, *without exception*, were infected with syphilis. As Boileau says, "Souvent la peur d'un mal vous conduit dans un pire." Under pretence of saving our soldiers from the risk of a dangerous disease, they inoculated into them one more dangerous. There was no possible doubt of the origin of the malady, for it was on the vaccinated arms and around the vaccine punctures that the ulcers developed. For fear of scandal, it was determined to acknowledge no fault; the soldiers themselves of course were to blame. They were left in the barracks; but the ravages of the disease were not so easily concealed. It was then decided to send the men to hospital, but by a few at a time, lest the truth should ooze out. The unfortunate victims poisoned by the official vaccine were placed among the wounded. They addressed their complaints to the medical inspector, and received in return a reprimand. In a few days the men were ordered back to the barracks with the exception of five, who were retained in a frightful state with their hair falling off and their gums rotting. The editor of *Le Petit Colon* calls for inquiry, bewails the unhappy fate of the young men who, in the performance of their patriotic duties, had been so cruelly stricken, and demands all possible reparation for the unfortunate victims of pretended official science, mortally stricken in their present, their future, and even their generation. In conclusion, the editor of the *Intransigeant* "associates himself energetically with these just demands," and imperatively demands inquiry.

THE STORY OF A GREAT DELUSION.

CHAPTER XXIX.

Baron's Life of Jenner.

We owe much to Baron's Life of Jenner, but as a collection of evidence rather than as an organic biography. It is verbose and loosely put together, and would never be read through unless by some one in quest of information, or with nothing better to do. Fortunately Baron was reverent and not critical. Jenner was to him a sacred being, admirable in all relations, whose only contention was with "the blindness and wickedness of his traducers." Lives written in this temper are often most instructive. Tales are told and letters produced in pious simplicity that biographers of the judicious order discreetly suppress.

Baron made Jenner's acquaintance in the summer of 1808 when he was living at Fladong's Hotel, Oxford Street, revelling in a fool's paradise as to his importance in the formation of the National Vaccine Institution. Baron had recently come from Edinburgh, and says—

"I was about to commence practice: all the world was before me. In seeking the acquaintance of Jenner I was impelled mainly by a desire to do homage to a man whose public and private character had already secured my warmest admiration. I little thought that it would so speedily lead to an intimacy, and ultimately to a friendship, which terminated only at his death, and placed me in a relationship to his memory that no one could have anticipated. The greatness of his fame, his exalted talents, and the honours heaped upon him by all the most distinguished public bodies of the civilised world, while they made me desirous of offering my tribute of respect to him, forbade the expectation of more than such an acknowledgment as a youth, circumstanced as I was, might have expected. I soon, however, perceived that I had to do with an individual who did not square his manners by the cold formality of the world. He condescended as to an equal; the restraint and embarrassment that might naturally have been felt in the presence of one so eminent vanished in an instant. The simple dignity of his aspect, the kind and familiar tone of his language, and the perfect sincerity and good faith manifested in all he said and did, could not fail to win the heart of anyone not insensible to such qualities. Though more than twenty years have elapsed since this interview took place, I remember it, and all its accompaniments, with the most perfect accuracy. He was dressed in a blue coat, white waistcoat, nankeen breeches, and white stockings. All the tables in his apartment were covered with letters and papers on the subject of vaccination, and the establishment of the National Vaccine Institution. He talked to me of the excellent article which had lately appeared in the *Edinburgh Review*, relative to the vaccine controversy. He spoke with great good humour also of the conduct of the anti-vaccinists, and gave me some pamphlets illustrative of the controversy then going on. The day before he had had an interview with the Princess of Wales, and he showed me a watch which her Royal Highness had presented to him on that occasion."*

The passage is a long one, but it has some value in itself, and exhibits Baron's habitual attitude toward his hero. In his domestic and social relations, Jenner appears to have been singularly amiable, but it is with his public life that we are concerned, and find so reprehensible. Mischievous leaders and teachers have been distinguished by private graces; and austere personal virtue is frequently associated with bland indifference to conventional immoralities; but we need not go far to discover counterparts of Jenner in ordinary life. Nothing is commoner than suavity combined with self-love that is malignant and mendacious when thwarted. All is pleasant as long as admiration prevails, but with dissent or resistance the sunny temper vanishes, and clouds of contempt and fury overspread the spiritual sky. A sharp test of character is a man's disposition to his adversaries; and Jenner's was never magnanimous. His conduct to Pearson, Woodville, and Walker has been sufficiently described; and similar jealousy and spitefulness were displayed to whoever dared to impugn the absolute efficiency of cow-pox in preventing small-pox. No one, for instance, could have brought forward the fact that small-pox occasionally succeeded vaccination with more simple good faith than Goldson; yet Jenner wrote of him with insufferable insolence—an insolence that is thrown into stronger relief by the knowledge that what Goldson testified is accepted at this day, even by vaccinators, as indisputable matter-of-course. His bully, too, John Ring, attacked Goldson, and Jenner, in writing to Dunning, 23rd December, 1804, thus excused his brutality—

"You speak of Ring and Goldson. Recollect there was not time to be cool. What lover of vaccination — what man, well acquainted with its nature, and that of small-pox, could read Goldson's book, and lay it down coolly? Ring, the moment he read it, and what indeed was infinitely worse than the book itself, its murderous harbinger—the advertisement, instantly charged his blunderbuss, and fired it in the face of the author. I must freely confess, I do not feel so cool about this Mr. Goldson as you do. His book has sent many a victim to a premature grave; and would have sent many more, but for the humanity and zeal of yourself and others who stepped forward to counteract its dreadful tendency."*

In the same spirit he wrote to Baron, 6th November, 1810, of Brown of Musselburgh, who had reported certain cases of small-pox after vaccination in a London newspaper—

"Some notice must be taken of Mr. Brown's communication; but if he thinks he shall be able to draw me into controversy, he will be mistaken. His letter, under the veil of candour and liberality, is full of fraud and artifice; for he knows that every insinuation and argument he has advanced, have been refuted by the first medical characters in Edinburgh and Dublin. But the mild, gentle, complaisant antagonist, is a character more difficult to deal with than one who boldly shows his ferocity."†

In short, calm discussion of vaccination with Jenner was never possible. Inquiry was borne down with clamour, and scepticism denounced as malevolence. "He could not altogether

* Vol. ii. p. 136.

* Vol. ii. p. 24. † *Ib.* p. 47.

escape," says Baron, "from the annoyance occasioned by *the blindness and wickedness* of his traducers"*—and all were traducers who were not believers. Indeed, Baron could only account for the perversity of those who did not recognise Jenner as the saviour of mankind from small-pox by a resort to the doctrine of inbred depravity, saying—

"We are compelled to believe that there is a principle in our nature which has too strong an affinity for what is untrue to permit the understanding to discern or acknowledge an opposite principle till both the moral and intellectual vision has been purified and strengthened"†—

Purified and strengthened, and the affinity with falsehood dissolved, it became possible for the understanding to appreciate the virtue of cow-pox and the veracity of its advertiser!

Jenner, it may be said, instinctively resented investigation. He knew there was no safety in vaccination as practised; for the cow-pox employed was not the horse-grease cow-pox he had commended as efficacious. What he had prescribed was disregarded; what he had condemned was approved; but strange to say, he was praised and rewarded by the world as if cow-pox had been his specific! Jenner accepted the situation, and possibly came to believe (after a fashion) that he was enjoying no more than his own; but under the circumstances it was not surprising that he shrank from criticism, kept his early publications out of the way, and resorted freely to abuse whenever scrutiny appeared imminent.

Worse even than his behaviour to investigators and opponents was his treatment of those who converted vaccination to practice. The *Inquiry* was no handbook, and Pearson, Woodville and other early vaccinators had to make their own way, not only unassisted, but with Jenner ready to appropriate their successes and to reproach them with their failures. Baron avers that nothing in the art of vaccination was due to any one but Jenner himself, qualifying this praise with a slight exception in favour of Dr. Bryce of Edinburgh, who made the discovery that if a subject under vaccination is re-vaccinated, the subsequent inoculation is caught up and brought to maturity with the precedent—a phenomenon that as Bryce's Test was used to ascertain whether true vaccine fever was operative. But even Bryce received scant acknowledgment, and Baron tries to make out that Jenner was possessed of the fact ere it was announced.‡ Jenner's meanness toward those who displayed any intelligent independence in co-operation with him is written at large in Baron's biography, but with such innocence that it would be absurd to describe it as indecent. His good faith is perfect, and it is only a critical reader that finds out how he is identified with Jenner, seeing merit nowhere save in his abject servitors and feminine *claque*.

Most vaccinators at this day allow that the influence of vaccination wears out and ought to be renewed; yet Jenner would not listen for a moment to such a modification of its perpetual prophylaxy. Baron writes—

"The year 1804, in Jenner's estimation, formed an era in the history of the Variolæ Vaccinæ. The assertion, that the cow-pox afforded only a temporary security was then insisted on. Had it been correct, it would have deprived the discovery of nearly all its value. This assertion was very easily made; and in the infancy of the practice could not be well disproved. To these circumstances it was owing, that the crude and unsupported statements of Mr. Goldson acquired any influence. Dr. Jenner himself, from the commencement, perceived that in his cases of failure, cow-pox had never been properly taken."*

When in 1813 Lord Boringdon introduced his bill to Parliament for the restriction of variolation, Lord Ellenborough observed—

"No doubt vaccination is of some use, but if the noble lord considers it a complete preventive of small-pox, I differ from him in opinion. At the same time, I have proved my respect for the discovery by having my eight children vaccinated. I believe in the efficacy of vaccination to a certain extent. It may prevent the disorder for eight or nine years; and in a large city like this with a large family of children, even this limited protection is desirable."

In this declaration the Chief Justice was not singular, but expressed the general conviction of the public who held by vaccination in spite of the manifest failure of the early promises made for it. Nevertheless Jenner was extremely annoyed: it was to him as the formal deliverance of judgment. Baron says—

"I have seldom seen Jenner more disturbed than he was by this occurrence; not certainly because he had any fears that the unsupported assertion of his lordship would prove correct, but because it unhappily accorded with popular prejudices, and when uttered by such a person, in such an assembly, was calculated to do unspeakable mischief by unsettling the confidence of numberless anxious parents, and by attempting to deprive vaccination of more than half its virtues."†

Thorough was Baron in his defence of Jenner: no inconsistency appalled him. He records in capitals (as produced) the following as Jenner's solemn and final testimony, written, a few days before he expired, on the back of a letter, bearing the post-mark, 14th January, 1823—

"MY OPINION OF VACCINATION IS PRECISELY AS IT WAS WHEN I FIRST PROMULGATED THE DISCOVERY. IT IS NOT IN THE LEAST STRENGTHENED BY ANY EVENT THAT HAS HAPPENED, FOR IT COULD GAIN NO STRENGTH; IT IS NOT IN THE LEAST WEAKENED, FOR IF THE FAILURES YOU SPEAK OF HAD NOT HAPPENED, THE TRUTH OF MY ASSERTIONS RESPECTING THOSE COINCIDENCES WHICH OCCASIONED THEM WOULD NOT HAVE BEEN MADE OUT."‡

Self-deception after this pattern is far from uncommon, and is proof against evidence and death itself; but Jenner was not quite so crazy as his words imply. From his first opinion about vaccination, and its absolute efficacy against small-pox (unlike anything hitherto known in medical experience) he had retreated considerably. Even so early as 1804 he had

* Vol. ii. p. 148. † *Ib.* p. 110. ‡ Vol. i. p. 450.

* Vol. ii. p. 18. † *Ib.* p. 197. ‡ *Ib.* p. 311.

reduced his claim for vaccination to equality with variolation. In that year he observed—

"What I have said on this vaccine subject is true. If properly conducted, it secures the constitution as much as variolous inoculation possibly can. It is the small-pox in a purer form than that which has been current among us for twelve centuries past."*

And again Baron cites him as saying—

"Duly and efficiently performed, vaccination will protect the constitution from subsequent attacks of small-pox, as much as that disease itself will. *I never expected that it would do more*, and it will not, I believe, do less."

Jenner presumed freely on the forgetfulness of those he addressed. In a document so well-known as his petition to the House of Commons in 1802, he expressly claimed that a person inoculated with cow-pox was thereby "rendered perfectly secure from the infection of small-pox through life"; nor would the furore which attended the introduction of the practice have been possible had it been set forth as no more than a milder form of variolation. That cow-pox was equivalent to small-pox for inoculation was laughed at by the variolaters; but that a vaccinated person was as safe from small-pox as one who had passed through the disease, was true in no other sense than that Jenner wished it to be true, and prophesied accordingly. It was by such contrivances that he broke his own fall, and alleviated the disenchantment of the credulous.

Oddly enough Jenner's fiction, that vaccination was as good against small-pox as small-pox itself, was revived in the innocence of ignorance by Sir William Gull before a committee of the House of Commons in 1871. "Vaccination is as protective against small-pox as small-pox itself," said the fashionable physician. Confutation was, however, at hand. Mr. Marson (for thirty-five years resident surgeon of the Highgate Small-Pox Hospital) attested that cases of small-pox after small-pox were comparatively rare — not 1 per cent.; whilst 84 per cent. of those admitted to the Hospital in 1864 were vaccinated. An instructive contrast between fancy and matter-of-fact!

Baron, with his unscrupulous disregard of evidence, complains that vaccination should ever have been represented as an infallible preventive of small-pox; so that as pointed out in the Report of the Royal College of Physicians in 1807, "the fate of the new practice was made to hang on the occurrence of a single case of small-pox"; and goes on to observe—

"This, I am sorry to say, was a great misapprehension; the opposers of vaccination endeavoured to place the fate of vaccination on such an issue; but if Jenner's principles be duly considered, he never at any time sanctioned such an idea; and long before the practice of vaccination became general, he anticipated failures, and explained the circumstances under which they were most likely to occur."†

The summary answer to this statement is, that it is untrue. Jenner anticipated no failures. On the contrary, he vehemently denied them; and when denial could no longer avail, he invented a variety of excuses, such as spurious cow-pox and omnipresent herpes, to account for their occurrence; though always ready (as we have seen) to hark back to his original assertion that vaccination was "an infallible preventive of small-pox." Baron did not like the word "infallibility." He writes—

"I am not sure that the expression was ever used by Dr. Jenner himself. If he did use it, he certainly very soon accompanied it with the necessary qualification. He may perhaps at the outset have stated his opinion somewhat too decidedly; but no one qualified to judge can doubt that from the very beginning he was possessed of the gauge by which to measure the virtues of vaccination."*

Whether he did make use of the word "infallible" is of slight importance. There are various modes in which the same meaning may be conveyed, and Jenner's was unequivocal. It was in 1801 that appealing to the rigid scrutiny that had taken place in the first professional circles of Europe, he deliberately proclaimed it as certain—

"That the human frame, when once it has felt the influence of the genuine Cow-Pox in the way that has been described, is never afterwards, at any period of its existence, assailable by the Small-Pox."†

When Lord Ellenborough in 1818 described vaccination as affording no more than a temporary security from small-pox, he merely expressed the diminished confidence of the community in the practice; but it is the habit of adventurers to ascribe adverse manifestations of public feeling to private and petty causes; and thus Jenner held that the Chief Justice was indulging a personal grudge when he threw doubt on the perpetual efficacy of his prescription. On one occasion, so ran the story, Ellenborough was relating in a company at St. James's how Jenner had so little faith in cow-pox that he had used small-pox to inoculate his own child, when he was suddenly confronted by an irate personage, who exclaimed, "I am Dr. Jenner, and what you have stated is not true!" whereupon Ellenborough slunk aside in confusion. The fact of the rencontre in the sensational form, we may credit as we please; but about the variolation of Jenner's child there is no doubt whatever. We have the circumstance recorded by himself with such explanation as he considered adequate.

Turning to the *Inquiry*, we find under case XXII. that Robert F. Jenner, aged eleven months was vaccinated on 12th April, 1798, and that, "he did not receive the infection." The operation was not repeated, and he remained unvaccinated. Some time afterwards, whilst Jenner was residing at Cheltenham, Mr. Cother, a surgeon, happened to drop in, and having taken the child in his arms, mentioned in the

* Vol. ii. p. 15. † *Ib.* p. 135.

* Vol. ii. p. 134.

† *Continuation of Facts and Observations*, p. 151.

course of conversation, that he had just left a family suffering from small-pox. "Sir," cried Jenner, "you know not what you are doing! That child is not protected." What was to be done? "There was no doubt on my mind," says Jenner, "that the boy was infected;" and, having none of the precious horse-grease cow-pox in his possession, he held that he was without alternative, and by Mr. Cother the lad was immediately inoculated with small-pox.

The fact in due course got abroad, and, as Baron relates, was made the most of by the opponents of vaccination—

"One observed, 'Dr. Jenner may say what he likes about vaccination, but we know for certain that he has inoculated his own son with small-pox.' Another repeated this statement with the addition, that he had done so because he mistrusted vaccination. A third added another tint to deepen the colouring, affirming that he knew that Dr. Jenner had abandoned his confidence in vaccination, and the proof is incontestible, as he has inoculated his own child with small-pox. These stories passed from mouth to mouth, and afterwards appeared in print with every malignant interpretation."*

Such talk was very natural, nor was it without justification. Jenner ought to have proved his sincerity by the vaccination of his son; and he who denounced variolation and variolators with such bitterness might have accepted the risk of infection from Mr. Cother rather than have compromised himself so injuriously. Moreover (as was asked at the time) if the child was infected, what was the use of inoculation? Variolation and vaccination (it was argued) may be serviceable in keeping off small-pox, but are of no avail after infection.

Vaccination has been described as a remarkable survival of superstition in hygiène—many, who disowning all other dodges for the maintenance of health, holding by it. Of course Jenner knew nothing of hygiène in the scientific sense—it was revealed after his time; but it is noteworthy that in none of his publications or letters is there any anticipation of the truth that has proved so fruitful in our experience, namely, that ill-health indicates ill-living, and that the misery of disease is only remedial in so far as we come out of the conditions of disease. Whilst of such truth he knew nothing, he might have known something. It lay plainly before him that small-pox was an affliction of the poor, and of the prosperous in so far as they shared the conditions of the poor, but he never recognised the fact. On the contrary, he cherished the fantasy that various diseases were derived from association with animals; and that thus small-pox originated in cow-pox, which in turn came from horse-grease. "There," said he to his nephew, pointing to a horse with greasy heels, "there is the source of small-pox."† To entertain such an opinion was to be stone-blind to the true causes of disease, and therefore we have no reason for surprise that the Jenner household lived in chronic ill-health, piously submissive to what they supposed the divine will. Typhus fever was recurrent in the household without a suspicion that anything was amiss on the human side. There was a genius named Dawes Worgan, whom Jenner received into his family as tutor to his son, but ere a year had elapsed the poor fellow had two attacks of typhus, and finally succumbed to pulmonary consumption in 1809, in his nineteenth year. Chantry Cottage, Jenner's residence at Berkeley, was no temple of Hygeia: on the contrary such a place at this day would be a terror to a respectable neighbourhood, and subject to the attention of the sanitary inspector.

The principle of vaccination conceded—that health may be purchased by disease, it was not surprising that it was thought that measles and scarlet fever could be extirpated by similar treatment. Sir Humphry Davy suggested that hydrophobia might be anticipated by the inoculation of another animal virus, but Jenner held that cow-pox should be tried—nothing being like leather. It was reported from Constantinople that the plague itself was stayed by vaccination, and that experiments, exactly like those used to demonstrate its power against small-pox, had been repeated with complete success. There was not, however, enterprise in the East for the development of the quackery.

Jenner taught that distemper in dogs was preventible by vaccination, and accumulated a variety of "first-rate evidence" in proof. It was no transitory whim. He vaccinated twenty of the King's staghounds in 1801, and in 1809 contributed a paper to the Medico-Chirurgical Society on the subject, wherein he expressed the opinion that the disease had only existed in England for the past half century. Several great fox-hunters had their hounds vaccinated, and the results were pronounced satisfactory.* Why, then, was the practice not continued? Why is not distemper exterminated? May we not say the reason is plain? The first-rate evidence was illusory. Men are apt to create the facts they wish for, but as desire subsides, they recover their normal eye-sight. Cow-pox, we are persuaded, was as good against distemper in dogs as against small-pox in human beings, and but for extraneous causes, it would have been abandoned for the one as for the other.

For Jenner it has to be said, that if deceived, he had much to excuse his self-deception. There are men possessed of convictions which they maintain in the face of an indifferent or antagonistic world, but Jenner was not such a man. If his *Inquiry* had gone the way of waste-paper, he would have offered no resistance; but instead, it was proclaimed by Pearson as worthy of universal attention, and the hour being propitious, the middle-aged country doctor suddenly found himself treated as the deliverer of mankind from small-pox, whilst Pearson, his promoter, was swept aside as a half-hearted worshipper of the new divinity. Adulation was administered without measure, and if Jenner took it for true, and was led to imagine that he had more in him than he ever imagined, what marvel! He became the centre of a European craze of a character and intensity that is perhaps without parallel. Emperors and kings, states-

* Vol. ii. pp. 48-49 and 198 † *Ib.* Vol. I. p. 135.

* Vol. I. pp. 444, 450; Vol. II. p. 148.

men and philanthropists, men of science, and in short the whole educated world conspired to do him reverence. The craze gradually abated, and the abatement was most decided in the country of its origin, and chiefly in London where cow-pox and its advertiser were most closely scrutinised. Jenner abhorred London. There he had proposed to flourish as a West-End physician, and there he had encountered a dismal failure. There, too, his antagonists were active, and their demonstration of the futility of his assertions most conclusive. We see his temper toward London in such a passage as the following from a letter to Dunning, dated Cheltenham, 21st February, 1806—

"What havoc the anti-vaccinists have made in town by the re-introduction of the variolous inoculation! It is computed that not less than 6000 persons in the metropolis, and the adjacent villages, have fallen victims to the small-pox since April last. One would scarcely conceive it possible, but these murders are, for the most part, to be attributed to the absurd productions of Moseley, Rowley, and that pert little Squirrel, to say nothing of Goldson. It is about London that the venom of these deadly serpents chiefly flows."*

Whilst the doors of almost every scientific corporation in the world were thrown open to receive him, the Royal College of Physicians of London maintained an honourable reserve; and when in 1814 his claim to admission was strongly urged, the majority insisted that, if received, he should submit to the usual examination—a sufficient check in Jenner's case.† The College has been reproached for its treatment of "the immortal benefactor of the human race," but it is forgotten how intimately the leading members were acquainted with his immortality, and with what disgust they must have received his confession in 1807 as to the existence of spurious cow-pox.

Toward the close of his life, Jenner rarely appeared in London. His last visit took place in 1814, when he was presented to the Emperor of Russia. "I am happy to think," said Alexander, "that you have received the thanks, the applause, and the gratitude of the world;" to which Jenner made answer, "I have received the thanks and the applause, but *not* the gratitude of the world"—the absent gratitude being a periphrase for absent cash, and a hint to the Czar that he had forgotten the superb munificence of his grandmother, Catharine, to her inoculator Dimsdale. Jenner always reckoned himself ill-paid; and taking the words of his admirers for sincere, he was ill-paid. Many a successful slayer of his kind got much more from the House of Commons with less fuss than their ideal preserver; but there is often a measure of sincerity within insincerity, and many of those who praised Jenner most rapturously felt that he had not been dealt with illiberally as an advertiser.

Jenner's wife died in 1815, an ailing, pious, affectionate woman, and thenceforth he dwelt in retirement until his death on the 26th of January, 1823, at the age of seventy-four. There was not enthusiasm left to effect the interment of his remains in Westminster Abbey, and the funeral took place at Berkeley. An attempt was made to obtain a grant from Parliament for a monument, but the proposal fell flat. Baron then set on foot a subscription for the purpose, but it met with little encouragement. The only public bodies which contributed anything were the Edinburgh Colleges of Physicians and Surgeons, the first sending £50 and the second £10. With much difficulty sufficient was scraped together to order a statue from Sievier, which was set up at the west end of the nave of Gloucester Cathedral. The front panel of the pedestal originally bore the dates of birth and death, but Baron had them removed, considering the word JENNER all significant.

In latter times, in 1859, a statue was erected to his memory in Trafalgar Square, London, close by the College of Physicians, but it was felt to have an air of possible quackery about it, and by and by was quietly removed to a corner in Kensington Gardens. There is, as we have remarked, a measure of sincerity even in insincerity, and in spite of assertion to the contrary, it is impossible for any one with a lively sense of veracity to believe heartily in Edward Jenner.

* Vol. II., p. 352. The London Bills of Mortality record 1685 deaths in 1805 and 1158 in 1806 from small-pox—numbers in no respect extraordinary. † *Ib.*, p. 191.

A LITTLE CONFESSION.—The 42nd annual report of the Registrar-General for the year 1879 records the deaths of 32 infants from "Erysipelas after vaccination" and 4 from "Cow-pox."

POOR MR. DODSON!—When Mr. Dodson was appointed President of the Local Government Board we had hope in his administrative ability: as yet he has only shown his proficiency in masterly inaction.—*The Lancet*, 25th June.

MR. THOMAS BAKER at the monthly Conference of the London Society on 18th July, dissected Dr. Buchanan's Memorandum as a statistician; and was followed by Dr. Pearce, Mr. Tebb, Lord Clifton and others. The next Conference in Victoria Street will be held in October; meetings in August and September being out of season in London.

SOMERVILLE CLUB.—At this ladies' club a lively discussion on vaccination was led off by Dr. Haughton on 13th July, and Dr. Snow asserted his confidence in the practice, and proved it by saying he had been vaccinated four times! These much vaccinated doctors are capital illustrations of the futility of their own faith, and should be secured for exhibition whenever possible.

HALIFAX.—At a large public meeting in Halifax on 19th July, this resolution was passed unanimously—"That this meeting is fully convinced that Vaccination and re-Vaccination have utterly failed either to prevent or mitigate the disease of small-pox, which has been clearly proved to demonstration by the 15 cases of small-pox which have occurred at Halifax within the last four months—all of whom were vaccinated but one, who has recovered; whilst four out of the 14 that were vaccinated have died; and two of the nurses in the Fever Hospital took the small-pox in less than a week after being re-vaccinated; and therefore pledges itself to use all just and lawful means for the entire repeal of the most unjust and despotic compulsory vaccination law."

DR. BUCHANAN'S MEMORANDUM.

THE reproduction in the newspapers of Dr. Buchanan's Memorandum, and the general refusal of editors to permit any discussion of its accuracy, has led many to inquire whether it cannot be answered. Our reply is that we are always dealing with the fallacies that underlie this Memorandum, and we do not imagine that any of our readers are likely to be led astray by its sophistry. Still, as truth never can be confirmed enough, we may incur the risk of repetition so that the nature of our contention be made clear.

First, for the information of our friends outside England, we would define Dr. Buchanan's position. He is not an independent investigator. He is head of the Medical Department of the Local Government Board with a salary of £1200 a year, and his *raison d' être* and that of his well-paid subordinates is Vaccination. They live and thrive by the practice. Now we do not mean to say that Dr. Buchanan advocates vaccination because he is paid for it; but we do say that in consequence of his position his testimony cannot be received without more than ordinary reserve; and if such suspicion be stigmatised as ungenerous, we answer, let us look at his case in another way. Suppose Dr. Buchanan threw up his office and announced that he had become convinced that vaccination was a delusion which he could no longer sanction, would not all, even those who might think him mistaken, praise him for his honesty, his courage, his self-sacrifice? And if so much might be said of this procedure, and said truly, wherein are we at fault if we impute to him a bias from his position and emoluments?

Setting aside, however, the personal question let us look at the facts as asserted. In fifty-two weeks of 1880-81 there died in London of small-pox 1532 persons, of whom, says Dr. Buchanan, "325 were certified to have been vaccinated, and 687 not to have been vaccinated; while the fact about vaccination was not stated in the case of 570 of the deaths."

The first observation that occurs under this statement is the intolerable looseness of the data. Here is Dr. Buchanan in the centre of an epidemic, with a competent staff, and every facility for inquiry, and yet he has to confess that of a total of 1532 deaths no less than 570, or upwards of one-third, are unaccounted for as to the supreme point in question! Nor does he exhibit any sharp sense of his defective position, nor how the absence of so much certainty must vitiate any conclusion, nor how similar ignorance is to be prevented in future. On the contrary he enters into a speculation as to the reason why the fact in so many cases was not stated, inclining to the opinion that the disobedience of the dead to the law was concealed by their medical attendants out of reverence for their memories. One speculation being as good as another, or, in Irish phrase, a good deal better, we would advance the opinion that the majority of the 570 cases "not stated" were vaccinated. Such is the overpowering prepossession of medical men in favour of their superstition that a death from small-pox is taken as *primâ facie* evidence of the absence of vaccination, and therefore "not stated" simply represents their unwillingness to testify to the truth that so painfully affronts their inbred prejudice.

Unable to make use of the 570 cases "not stated," Dr. Buchanan rules them out of consideration, and proceeds to execute a variety of conjurations with the proportions of 325 vaccinated and 687 unvaccinated and the population of London taken as 3,810,000. It seems an elaborate jest. Less than a thousand deaths in nearly four millions—1 in 40,000! What practical relation can such numbers bear to each other in a complex question of health and disease? We have merely to look at the figures to perceive that we are introduced to a realm of fancy when our business is with a patch of reality. London covering an area of 144 square miles, occupied with populations of widely diverse character, is treated as uniform, and an estimate presented to the effect that 3,620,000 of its inhabitants are vaccinated, and 190,000 unvaccinated, the immense number being held accountable for the 325 deaths whilst the small number is credited with the 687 deaths. Nor need we be surprised that in presence of such statistical romance we should be gravely informed that—

"As no one suggests that the vaccinated and unvaccinated classes live under conditions differing from each other in their influence on small-pox, *unless it be this one condition of vaccination*, it follows that the vaccinated are much less liable to die of small-pox than the unvaccinated."

Such an observation is nothing short of astounding. That the vaccinated and the unvaccinated differ only in the one condition of vaccination is a statement so wildly untrue that only a man ignorant of his fellow creatures, or contemptuous of the public intelligence, could venture to make it. Who are the unvaccinated? We need not tell Dr. Buchanan that they are, 1st, children too feeble to endure vaccination,

and therefore liable to perish under any prevalent malady; and, 2nd, the offspring of the vagrant and wretched classes, who, being without fixed domicile, have escaped the vigilance of vaccination spies and informers. No difference between the vaccinated and unvaccinated save in the one condition of vaccination! It would be difficult to conceive an assertion with any air of plausibility at such explicit variance with fact.

The great mass of the unvaccinated in London and elsewhere are of the two classes specified, the feeble and the wretched; but we as steadfast opponents of vaccination are accountable for many unvaccinated, and hope to be accountable for many more; and of these unvaccinated, by reason of serious inquiry and conviction, we defy Dr. Buchanan to prove that they are more liable to small-pox than their vaccinated neighbours; on the contrary, we hold that they are less liable. Among communities distinguished for their enlightened resistance to the Jennerian delusion, the place of honour is held by Keighley in Yorkshire; and in the course of a letter from a member of the Society of Friends there resident occurs this remark—

"It is quite unusual to have children vaccinated in this town; and I am sure in no place is small-pox less dreaded."

If Vaccination *versus* Non-Vaccination is to be tried, let the conditions be equal. Do not put unvaccinated feebleness and wretchedness against vaccinated vigour and well-being; nor suppose that resistance to vaccination is discredited because small-pox is kindred with other forms of zymotic disease, flourishing in the same circumstances and deadly to the same subjects.

Nor is Dr. Buchanan fully met by demanding, Who are the unvaccinated? The question has to be put still more broadly: Who were the 1532 who died of small-pox? To what section of Londoners did they belong? In what parts of London did they reside? What were their avocations, and what their condition physically? Until such facts are set forth in detail, an epidemic of small-pox can never be studied to any purpose; and to accept such figures as Dr. Buchanan's as their substitutes is to play with counters. Where a sufferer from small-pox lives, how he lives, and what is his habit of body are particulars of infinitely greater moment than such a triviality as vaccination. Small-pox is essentially an affection of the ill-housed, the overcrowded, the unclean. Why does not Dr. Buchanan state how many of the 1532 died in hospitals? nor indicate the horrible condition of many brought into hospitals from the worst parts of London?—with dirt so thick upon their skins that vaccination marks are indiscernible, with hair so matted that it has to be loosened with poultices; foul, in short, in raiment and person with foulness unspeakable! If we are to discuss small-pox we must take account of such horrors, nor be such fools as suppose that the epidemic with which Londoners are at present terrified prevails in houses over a certain rental. Even last century, when unsanitary conditions of life were much more equally diffused, it was notorious that small-pox was chiefly prevalent among the poor and wretched. Cross, in his description of the dreadful Norwich epidemic of 1819, states that its victims were "confined almost exclusively to the very lowest orders of the people"; and what was true of Norwich in 1819 is true of London in 1881, and has been true of every variolous epidemic in the three kingdoms. Hence we hold that if the circumstances of the 1532 who died in London during the past twelve months were ascertained, it would be plainly manifest that with the majority of sufferers the fatal issue was incidental to their miserable lot in life, with which vaccination had as little to do as had the colour of their hair or the length of their noses.

Whether, then, it were true that of the 1532 who died 637 were unvaccinated, we should account the fact as of slight importance. Being what they are, no severity of mortality among the unvaccinated would surprise us. Nevertheless we have little confidence in the accuracy of the figures. As observed in the case of the 570 "not stated," prejudice is so inveterate in favour of vaccination, that the evidence of vaccinators cannot be trusted. Mr. May of Birmingham has taught us that their practice must be preserved from reproach at all hazards, and that "pious frauds" are included in professional duty. In every town where a large mortality among the unvaccinated has been recorded, independent inquiry has proved that the vaccinated dead have been registered as unvaccinated. Death is taken as evidence of non-vaccination. It is constantly argued, with all the assurance of innocence,—"If the child had been vaccinated it could not have died"; and if the fact of vaccination happens to be indisputable, then it is said—"The vaccination must have been imperfect," and the case is set down as uncertain among the "not stated." Dr. Buchanan admits that the Registrar-General only returns as "vaccinated" such cases as are thus certified by registered medical practitioners:

hence a patient's assertion of his own vaccination, or a parent's of his child's, is dismissed as of no account. Wherefore in hospital cases (the majority in London) where vaccination marks are invisible by reason of the eruption,—and in confluent and virulent cases, which constitute the fatal cases, the marks are nearly always invisible—the patients are recorded as unvaccinated: and as frequently happens on recovery, vaccination marks re-appear upon the convalescents who, in the event of death, would have gone to magnify the evidence that makes for vaccination. It is because of so much experience of this order that we are compelled to set a judgment of No Confidence against Dr. Buchanan's statement of the unvaccinated dead.

No defence of vaccination at this day appears to be complete without a reference to Marson's doctrine of marks, and Dr. Buchanan shows himself strictly *en règle*. Good marks and many marks are set forth as the criterion of effective vaccination. Jenner, in this respect, was more philosophical. A single mark satisfied him; and if cow-pox operates after the manner of any other virus, one mark must be as efficacious as two, or ten, or twenty. Mr. Wheeler has, moreover, shown from the returns of the marksmongers themselves that their law is whimsical, contradictory, and good for nothing save as a fresh dodge to stave off the discredit of vaccination. The bit of reality that constitutes the basis of the marks illusion is simply this, that a well formed vaccine cicatrix represents a strong vitality with vigorous healing power, whilst an ill formed cicatrix represents a contrary habit of body; and *pari passu* those who heal well under vaccination stand likely to make the best recoveries in the event of small-pox. Good marks are simply notes of good constitutions, and the rest follows. Aught beyond is mere medical rubbish, on a par with faith in omens and divination by numbers.

With the other fallacies of Dr. Buchanan's Memorandum we need not concern ourselves. The central positions being untenable, the subsidiary fall of themselves. Still we cannot refrain from the expression of surprise that on the rotten data of 1532 ill-described cases of small-pox elaborate comparisons should be instituted between vaccinated and unvaccinated Londoners. That public time and money should be wasted on the production and publication of such frivolities in the name of statistics is scandalous.

Mr. Edwin Chadwick has forcibly observed that nothing is done for the public health unless death-rates be reduced—a reduced death-rate being the true test of sanitary improvement. Now, in this question of London small-pox, we have to note the conspicuous fact that small-pox does not raise the death-rate; and that, whether from cause or coincidence, when small-pox is prevalent, the general mortality is not over but under the average. Londoners are in the midst of what Mr. Proudfoot calls "an awful epidemic," but strange to say it has brought the undertakers no increase of business. Dr. Charles Cameron, M.P., has been ready to impeach the Right Hon. Mr. Dodson for culpable neglect of duty; but Mr. Dodson might reply, When was London healthier? and what lives have I to answer for? The able editors of the metropolitan press have been writing as if the population were "decimated" (their favourite word); and the walls of London have been covered with posters warning and imploring all who would save themselves alive to be vaccinated and re-vaccinated; whilst from door to door tracts have been distributed with appalling accounts of small-pox in former days, coupled with the recommendation of the sure and easy salvation introduced by Jenner, and adjurations to fly without delay to the nearest vaccinator.

Now observe, all the while that these panic-mongers have been roaring out the terror of small-pox and exalting the vaccine salvation, the Registrar-General has week by week been reporting a mortality in London below the average; so that in spite of "the awful epidemic," and the frightful increase of deaths from small-pox, fewer Londoners have been dying than usual. "Incredible!" exclaims a bewitched and bewildered reader; but Matter-of-fact, we reply; as whoever may discover who is pleased to use his eyes and refer to those weekly abstracts of metropolitan mortality which appear in almost every newspaper.

Further we say, the more Londoners have of the vaunted salvation, the more they have of the malady. Vaccination was never enforced with such energy as during the past fifteen years. Parents who object to the practice have been hunted up, prosecuted, fined, and imprisoned. The persecution has been persistent and relentless. Dr. Buchanan reckons that 190,000 have escaped the saving rite—a homeless, wretched, and unwholesome multitude; yet, according to the same official romancer, distinguished from the vaccinated by nothing save the absence of the marks of salvation! And what are the results of all this activity and oppression of unbelievers in Jenner? Here they

are neatly tabulated for us by the Registrar-General — an amazing record, under three decades—

LONDON.

Decades.	Estimated Mean Population.	Small-pox Deaths.
1851-60	2,570,489	7,150
1861-70	3,018,193	8,347
1871-80	3,466,486	15,543

In presence of this statement we demand, What have you got by the infliction of your sovereign rite? To assert that thousands of lives have been saved, or that the mortality would have been greater but for vaccination, is to argue after the manner of quacks and imposters. Dr. W. B. Carpenter, with that temerity which is his distinction, attributes the persistent mortality to the "unvaccinated residuum"; but whatever that residuum, it was prodigiously greater in 1851-60, when there was least small-pox, than in 1871-80, when there was most. Yet with more and more small-pox we have the cry for more and more vaccination, and repetitions of vaccination, even as dipsomaniacs resort for solace to the poison that has been their destruction.

Mr. Edwin Chadwick justly complains that small-pox, which is no more than an epidemic of the fifth magnitude, occupies a place in the public attention in vast excess of its real importance. The London mortality of 1532 cases of small-pox in twelve months is treated as something monstrous, and as cause for mortal alarm and superhuman activity; but how few recollect that from 80 to 84,000 die annually in London, and what are 1532 among so many! Presently small-pox will abate, perhaps cease, but mortality will not thereby be diminished. One form of zymotic disease will simply be replaced by another, probably of a more fatal type. Vaccination is not sanitation, and only by sanitation can death-rates be reduced. It is humiliating to have to state and re-state such elementary truths, and in presence too of those whose business it is to know them; but duties are duties however irksome or odious.

Even more exasperating than his circumscribed point of view, is Dr. Buchanan's indifference toward those commanding generalisations as to the unity and correlation of the forms of zymotic disease, which comparative statistics illustrate, and which constitute one of the first elements of sanitary science. As we have observed, Dr. Buchanan's exercises in the arithmetic of London small-pox are the product of his desk at Whitehall without reference to the places and persons of its generation; but it is less the absence of observation that is so trying to the scientific temper as the assumption that small-pox is an independent entity, which like Melchisedec is without father, without mother, without filiation—that can be annihilated by vaccination and be seen no more forever. Dr. Buchanan's predecessor, Dr. Seaton, boldly avowed that whilst other forms of zymotic diseases were conquerable by health, small-pox was an exception: there was but one means for its subjugation, namely, Vaccination. The frank tradesman-like spirit of the declaration has always touched us with a sense of bouncing, audacious absurdity; but whether Dr. Buchanan is prepared to maintain the tradition of the shop in Whitehall is perhaps questionable. We observe that in a recent publication he says—

"There are a good many indications of plague resembling typhus fever in its behaviour among populations living under conditions of privation, of squalor, and over-crowding; and just as it may be affirmed from our knowledge of the conditions of typhus that European populations *need no longer suffer from this scourge*, so it may be expected, as civilisation carries with it a knowledge of the elementary conditions for health, plague may, at least as an epidemic, be driven behind the more and more remote Asiatic and African frontier."

True, very true; but is not what is thus asserted of typhus, and consequently of plague, equally true of small-pox? We say it is, and we call for evidence to the contrary. Does not all experience prove that the same measures that save us from typhus save from small-pox likewise? and may we not reasonably argue, that if the energy and money that are now worse than wasted on vaccination were applied to the removal of those conditions in which all forms of febrile disorder are generated and diffused, we should not only get rid of small-pox, but of its associates, and effect a marked reduction in the death-rate and a vast improvement in the public health, which is the groundwork of national welfare?

DR. GARTH WILKINSON'S CATECHISM.

Q. When whooping-cough is not rife, what is that due to?
A. Nature.
Q. When scarlatina is not rife, what is that due to?
A. Nature.
Q. When cholera is not rife, what is that due to?
A. Nature.
Q. When small-pox is not rife, what is that due to?
A. Vaccination.
Q. When other diseases in the course of time have become mild or died out, what is that due to?
A. Nature.
Q. And when small-pox has become mild or died out, what is that due to?
A. Vaccination.

TO WHOM IS SUBMISSION DUE?

A CURIOUS phenomenon of the present era is the tendency to discountenance the dogmas of the paid State theologian, and yet at the same time to accept without inquiry the dogmas of the paid State physician. Under the sway of this illogical state of the public mind, two brothers entering the professions may find that legislative proposals in furtherance of his class interests made by the churchman will be coolly received, while concessions similarly demanded by the medical brother will be listened to with respectful awe, on the new principle that on medical questions the duty of the laity is submission; and as in former times almost every important subject could be construed into a theological one, so now the whole science of bodily health and sanitation is the natural perquisite of the medical expert. The Conservative press of France has taken alarm at the evident intention of the modern doctor to wield over the bodies of the commonalty a power as arbitrary and unlimited as that claimed of old by his theological predecessors in intolerance. *Le Conservateur de la Nievre* of the 21st June sarcastically says, "The drooping and dying Chamber, which is on the point of giving up its soul if it has a soul, is suddenly taken with a beautiful zeal for the public health —it is occupying itself with a law to make vaccination compulsory." The reference is to Dr. Liouville's Bill enacting compulsion in the first six months of life and subsequent revaccination every ten years. The Continental press tells us that the first reading of this wild proposal was smuggled through with great speed; but Dr. the Baron Larrey persuaded the Chamber to consult the Academy of Medicine before proceeding further. The vaccine zealots stoutly opposed. "Had not the Belgium Royal Academy of Medicine already decided that vaccination was protective?" In this matter we find that France relies for proof upon Belgium, Belgium on Germany, Germany on England, and the English vaccine propaganda relies upon itself, its powerful trade combination, its electoral influence, and its statistic infallibility. In the discussion in the Academy of Medicine Dr. Depaul, the pride of France, declared that the proposed Bill was inquisitorial, vexatious, intolerant, and impracticable. "Parents have rights, and on this subject they ought to be free." Depaul quoted, amidst the applause of the Academy, the eloquent protest of Dr. Conneau, first physician of Louis Napoleon, against similar proposals of compulsion before the Senate in 1868—"England, the classic land of liberty, which has been universally recognised as the model and guide of individual freedom, now sees the father of a family submitted to the most vexatious of obligations, that of causing his child to undergo an operation which he may believe to be injurious to the health of all that in this world he holds dear. We do not believe it will be possible to inflict such a law upon France. How can we hope to render popular a proposal so contrary to parental feeling? At an epoch like the present, when liberty is invoked on every side, in everything and for everything, is proclaimed the most enviable of blessings, is demanded by authors, professors, and thinkers of every school, why should we enact a law which would take away the dearest and most sacred of all liberties, the liberty of the parent to superintend according to his conscience the health and development of his child? A feeling of repulsion towards the vaccine operation is by no means rare. Even the profession acknowledge that very serious consequences may occasionally follow. Let truth work its own way. Let it be aided by persuasion and not by persecution. Let us use all our science to diffuse sanitary knowledge. Let us combat prejudice and ignorance, but do not let us try to stifle the rights and liberties of the parent." Dr. Hardy opposed compulsion: he would not attach his signature to a proposal which would convert the doctor into a sort of executioner. Dr. Guerin said a large number of medical men consider a general vaccination and revaccination to be in itself one of the causes of small-pox; a crowd of the newly vaccinated to be itself a dangerous centre of infection; and the 150,000 revaccinations in Paris during the siege to be in some degree responsible for the great epidemics of 1870-1. Dr. de Pietra Santa, secretary to the Société d' Hygiène, said, "The Senate of the Empire, authoritative, absolute, and dictatorial as it was, has rejected vaccine compulsion in the name of the sacred principle of parental liberty, and it is to a liberal, progressive, and Republican Parliament that the partisans of coercion resort, in the name of ill-defined principles of social utility." Dr. Depaul said that the vaccine party spoke slightingly of the risk of contracting disease in vaccination. "If such cases were not *common*, they were not *impossible*. At this moment one of our respected colleagues is being sued for 15,000 francs damages for death from syphilis contracted in revaccination." Dr. Depaul alarmed the compulsionists by advising the Academy to institute a full inquiry into the vaccination question. This was too much. Inquiry, as vaccinating enthusiasts implicitly recognize, is *doom*. Dr. Fauvel said the opposition of Dr. Depaul was formidable on account of the weight and authority of his name. "Anti-vaccinators will trumpet it about that Depaul is against compulsion, and the public will believe that he is against vaccination also. His opposition reposes on the defence of personal freedom and on the rights of parents over their children. I hope the Academy will not be influenced by our honoured colleague."

Dr. Pigeon, of Fourchambault, is arranging a counter-project, to be presented to the Chamber, suppressing compulsion, both direct and indirect, and leaving the practice optional. It is expected that this counter-project will receive the adhesion of the best names in the French medical profession.

The editor of the *Conservateur de la Nievre* says, "This is a question which interests every one." He recommends his readers to study Dr. Pigeon's letter to the Deputies. Dr. P. quotes a noble passage from Claude Bernard—"When we meet with a fact which is in opposition to a reigning theory, we ought to accept the fact and abandon the theory, however general the belief

and however great the names of its supporters." Dr. P. says the small-pox is a far less dangerous complaint than most of the epidemic diseases, while the vaccine is liable to introduce maladies which may end in death. He concludes that in vaccinating an infant we risk its life under pretext of saving it from a problematic attack of small-pox. "But is the vaccine really a preservative?" is the pertinent question of the editor. "Ardent partisans (he continues) now admit the liability of the vaccinated." Dr. Pigeon says, "Every physician who has been engaged in an epidemic knows that a relatively large number of the vaccinated have been attacked;" and he goes so far as to say that the vaccine virus, instead of being a preservative, actively assists the natural causes of small-pox, and tends to render the attack more dangerous. Dr. P. also says that vaccination inoculates into the human organism whatever pernicious germs or impurities exist in the person or infant from whom the lymph is taken. "These things make us reflect," says the editor, in conclusion, of *Le Conservateur*.

We may well reflect when we consider that lymph may pass through a dozen or a score of children in succession. Who knows whether it is not capable of transmitting all their constitutional complaints? An influential French doctor says, "The demonstration of the inefficiency and also of the dangers of vaccination seem to me to be definitively established." A medical man writing to the *Standard* says he believes most of the lymph now in use to be worn out: it is still capable of producing a pustule, but fails to prevent small-pox. Meanwhile, in London, earnest upholders of vaccination at all hazards are engaged in proving too much, and "metropolitan statistics" can now be met with showing the imperfectly vaccinated with a lower death-rate than the vaccinated! H. D. DUDGEON.

FAINTING UNDER VACCINATION.—Dr. Richard Neale of 60 Boundary Road, St. John's Wood, writes in the *British Medical Journal* of 25th June—"During the last few months, I have vaccinated between three and four hundred patients, and of these six or seven have gone off into dead faints, in one attended with vomiting, but in no instance followed by convulsions."

AN ACCURATE INQUIRER.—M. W. S. writing from Glasgow says—"I am impelled to further inquiry by the averment made that the advocates of Vaccination omit from their reasoning two very important considerations—1. The effect upon the prevalence of small-pox produced by the cessation of the condemned practice of inoculation. 2. The notorious fact that *sickly* children are legally exempted from the vaccination law. If the practice of inoculation was rightly put a stop to as tending to spread small-pox, its stoppage is an important factor in calculating results. Now if it be the case that the Vaccinators *habitually* ignore these two considerations, even in their best defences, their reasoning must be seriously vitiated. Even granting the truth of their statistics, their deductions from these statistics must be far from reliable. Besides this, there is the suspicious circumstance that the *original* claim of *complete immunity* for the vaccinated from attacks of the disease has had to retreat continually before advancing facts."

THE BATTLE OF THE LYMPHS.

A CORRESPONDENCE in the *Medical Press and Circular* of 13th July is most instructive, and if the public could only see it, they would begin to understand what a hopeless jumble of practice is represented by the word Vaccination. It was started by Mr. W. J. Collins, B.Sc., M.R.C.S., who observed that his investigations had led him to the conclusion that calf or animal lymph is a name applied indifferently to at least three different commodities possessed of entirely different properties—

"1. There is the lymph obtained by Ceely, Badcock, Burrows, and Thiele, by inoculating the cow with human small-pox virus. This, it would appear from the experiments of the Lyons Commission, never produces cow-pox. When it produces anything, it is true small-pox, and is capable of propagating that disease by infection.

"2. There is the lymph obtained by inoculating the calf with ordinary humanised lymph—retro-vaccination as it is called; a plan which does not insure the elimination of the much dreaded human impurities.

"3. There is the common source—the lymph got from cases of *spontaneous* cow-pox, and propagated on a series of heifers. This (bovine disease apart) would commend itself warmly to the minds of many, but strange to say, this very lymph has been denounced in no measured terms by 'the immortal Jenner' as unprotective against small-pox." (See pp. 7 and 8 of his *Inquiry*).

Dr. Warlomont of Brussels replies to Mr. Collins, asserting, 1st, that as a source of cow-pox, the inoculations of Ceely, Badcock, Burrows and Thiele were utterly bad, utterly delusive. The Lyons Commission left not a doubt that from inoculated small-pox nothing could be derived but small-pox. It would be as reasonable to sow barley and expect to reap wheat as to convert small-pox into cow-pox by implanting it in cattle. 2nd. As for retro-vaccination, it is a good means for the purification and propagation of lymph, but it is not absolutely trustworthy. It is subject to accidents, and the stocks are liable to extinction. Hence he has dismissed retro-vaccination. 3rd. The true practice is animal vaccination—the inoculation of calves with spontaneous cow-pox, transmitting the virus from calf to calf without the intervention of any human organism whatever. This is the method pursued at the Belgian Vaccine Institute with a success beyond expectation. After a practice of sixteen years, no one vaccinated or re-vaccinated with calf lymph of the Institute has been attacked with small-pox. It is true that Jenner denied the virtue of such lymph, but the immortal Jenner was not infallible—in this matter, he was simply deceived.

Dr. Wyld, as usual, echoes Dr. Warlomont—"Jenner was a great man, but he was not infallible, and he held some views regarding the origin of vaccinia in the heifer which are now abandoned."

Dr. Drysdale takes up a peculiar position. He believes in Warlomont's calf-lymph, and uses it, but adds—

"I may say that the lymph of retro-vaccination has now been acknowledged by the best authorities to be non-protective. The present evidence goes

to prove that vaccinia is a modification of human variola, and that Ceely, Badcock, and Theile were right, and the Lyons Commission wrong."

Lastly, Mr. George Fleming, President of the Royal College of Veterinary Surgeons, says—

"Jenner was in the wrong when he asserted that vaccine lymph—*i.e.*, lymph obtained from cows affected with so-called 'spontaneous' vaccinia—is unprotective against small-pox in man. He contradicted his own evidence, and that of others. Human small-pox is not vaccinia, and cannot be converted into that malady. All recent attempts to produce this conversion in France, Italy, and England have failed. The two affections are widely and specifically different. Inoculating cows with small-pox matter, and re-inoculating people can have only one result—but not that of producing the vaccine vesicle."

A continuation of the correspondence is promised, and we look for it with interest. The Editor in a leading article says—

"If it be admitted that Ceely, Badcock, and others did not engender cow-pox by inoculating cows with small-pox matter, the question arises—What did they produce? There is only too much reason to apprehend that they only produced a localised small-pox eruption, and that the virus they obtained from it was not that of vaccinia, but of small-pox. When we know that this virus was largely employed to *vaccinate* children, we can form our own conclusions as to the result."

VACCINATION PENALTIES.

Mr. Burt asked the President of the Local Government Board on 1st July, Whether a person who has been once fined under Section 31 of the Vaccination Act of 1867 is liable to be again fined within twelve months under the same order; whether the magistrates have power to grant as many fresh orders as may be demanded by the local guardians; and whether there is any analogy in other statutes for a repetition of fines under the same magistrate's order, or for a repetition of identical orders for an identical purpose, such repetition of fines or orders not being specially provided for by the statute.

Mr. Dodson replied—A person who has been once fined under section 31 of the Vaccination Act of 1867 is not liable to be again fined within twelve months under the same order; but the magistrates have power, when one order has not been complied with, to make a fresh order, and so on from time to time, on the application of the guardian. The Local Government Board have, however, frequently pointed out the expediency of discretion in the exercise of prosecutions thus repeated. It is not correct to say that the fines are repeated under the same magistrate's order, as a fresh order must be made before a second fine can be imposed; and the orders are not identical, as a fresh time is prescribed for the performance of the operation in each case.

Mr. Dodson's answer may be taken as accurate. The weak point is the recommendation of discretion to guardians, who are so often without discretion.

WILD EVIDENCE AND WILD TALK.

A meeting of the Metropolitan Asylums Board on 11th July was of more than ordinary interest. A report of Surgeon-General Bostock on the Stockwell Small-Pox Hospital showed that of 704 patients admitted during the past seven months, 191 were children under 12 years of age. Of these 83 were imperfectly vaccinated, 13 were doubtful, and 95 were unvaccinated. Of the vaccinated 2 died, the death in neither case being caused by small-pox. Of the 13 doubtful 9 died, while of the 95 unvaccinated no fewer than 42 died!

The report was received with appropriate expressions of horror. No one inquired what imperfect vaccination meant, nor who were the wretches that practise it; nor what were the origin and condition of the 95 children of whom 42 died—a rate of mortality that in any but a company of vaccination fanatics would have excited suspicion and inquiry. The all sufficient cause was taken for granted in the absence of vaccination, and as people like to be harrowed on that score, up rose Mr. J. G. Talbot, M.P. for Oxford University, and said—

"I do hope these facts may be made public, as they show that Anti-Vaccination Leagues may properly be called Murder Leagues, so dire and direct is their influence in preventing children from having the protection which the law prescribes. The persons, however well intentioned, who join these Leagues devote their energies to a most dangerous crusade."

Poor Talbot! Is it possible to hail from Oxford and know very little of one's fellow creatures. The parents of the children in Stockwell Hospital probably never even heard of an Anti-Vaccination League.

Sir. E. H. Currie said that in his experience at Darenth he had found that even children born in a London workhouse were allowed to be taken away without being vaccinated.

Mr. Bengough remarked that infants a fortnight old had been taken unvaccinated from a City workhouse simply because they were too young to endure the operation.

Dr. Bridges, Local Government Board Inspector, said there was no power to restrain mothers from taking away their infants unvaccinated.

Dr. Fowler, on the contrary, maintained that the Local Government Board had power in presence of an epidemic, or of an expected epidemic, to vaccinate all persons in poor law establishments. Under this power all infants born in workhouses should be vaccinated, and the earlier the better.

Surgeon-General Bostock added that infants born in small-pox hospitals were at once vaccinated and did well.

Mr. Proudfoot, seeing in the circumstances an opportunity for political business, thus delivered himself—

"I would call your attention, gentlemen, to the fact that the anti-vaccination agitation, which causes the spread of the terrible epidemic, is not confined to the ignorant, but the name of Sir Thomas Chambers, M.P. for Marylebone, and, as Recorder for the City of London, one

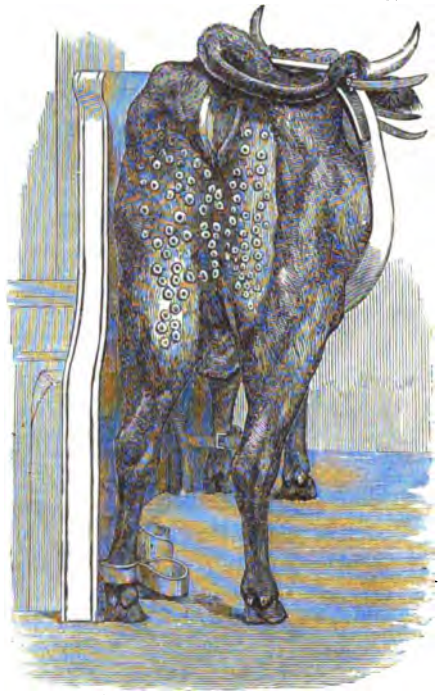
who has to administer the law upon those who break the law, is associated with this propaganda for disregarding the law. If Sir Thomas Chambers would look at the facts which come before this Board, he would see he was inflicting a great wrong upon humanity in using his influence to prevent people from having the protection afforded by vaccination."

Perhaps it would astonish Mr. Proudfoot to be accused of false witness. Sir Thomas Chambers is not associated with any propaganda for resistance to vaccination, and never was. He is familiar with the statistics of small-pox and vaccination, and has not concealed his opinion of their tendency either in the House of Commons or elsewhere; but he knows too well his position and duty as a judge to appear as an agitator, or to be associated with agitators, however good their cause.

"*Murder Leagues*"—Mr. Henry Pitman wrote to Mr. J. G. Talbot, M.P.—"I see by the *Times* that you call the associations for repealing the Compulsory Vaccination Acts 'murder leagues.' I can assure you that the members of these leagues consider that they are working for the abolition of murder by Act of Parliament. Why these opposite opinions? Both cannot be right. We have examined both sides. Have you? If not, I send you some materials for doing so, including the opinions of many of your fellow legislators."—The reply of Mr. Talbot showed that his strong abuse was based upon a weak and oft refuted argument—"HOUSE OF COMMONS, 15th July,—"I should have thought the condition of our people now, as compared with the times, not so very distant, when every household bore marks in the faces of its members of this fearful scourge, was alone sufficient to settle the question. I only wish to explain that I give credit to many of the anti-vaccinators for excellent intentions, and that when I used the expression 'murder leagues,' I meant leagues which would surely end in death. Of this I have no doubt."—The rejoinder was that the decrease of marking mainly arose from better habits of life and improved medical treatment; and that it could not be owing to the Jennerian nostrum, seeing that severe cases of small-pox had increased with compulsory vaccination. When the Archbishop of York raised this objection about pock-marked faces, an answer appeared in the *Inquirer* for 1879, p. 35. Mr. Talbot credits many anti-vaccinators with "excellent intentions," but he fears that our leagues will "end in death." Yes; in the death of vaccination.

CLEANLINESS WITHOUT AND WITHIN.—It is said that "cleanliness is next to godliness"; but is not cleanliness a part of godliness? The cleansing and saving process of regeneration will prove harder to a dirty person than to one who is clean. A daily bath in clean water is a wonderful promoter of cheerfulness as well as health; and if everybody were cleanly both in body and soul, there would be no need of vaccination, fever hospitals, or prisons. —WM. BIRCH *in Free Trade Hall, Manchester.*

THE PROPAGATION OF ANIMAL VACCINE.



THIS woodcut represents the vaccine disease in a well-developed stage on a young heifer in the vaccination stables of Dr. Bessey of Montreal. The animal, which had been vaccinated seven days previously on the inside of the buttocks, first clean shaven for the purpose, was literally covered over the vaccinated region with well-defined cow-pox pustules, singly and in groups of six to ten.

Another heifer stood in a stall awaiting vaccination from this animal, one being vaccinated from another consecutively. The eruption has been kept up in uninterrupted succession from the original case of spontaneous cow-pox found upon the Leney Farm, Longue Pointe, in 1877; and there has already been furnished from this source lymph for the vaccination of over 50,000 persons. It is now used by the profession from Halifax to Winnipeg, and by a goodly number of the profession in the border States. Lymph has been sent to members of the profession in England, and to Dr. Buchanan of the National Vaccine Establishment, Whitehall.

The history of the Longue Pointe stock of vaccine may be given briefly as follows:—On November 6th, 1877, Dr. Bessey visited the farm of Mr. John Leney at Longue Pointe, and found there six animals affected with cow-pox in various stages of development. From these cows sufficient lymph was taken to make a beginning, and on November 7th, the first child in Montreal (one Michael O'Mara) was vaccinated successfully with lymph. Animals at Logan's farm were inoculated with it, and from animal to animal, and child to child, the stock has been kept up ever since.—(Quoted from the *Canada Medical Record* in the *Medical Press and Circular*, 18th May, 1881.)

MR. WHEELER AND DR. CAMERON, M.P.

In the following correspondence the question of the proper classification of cases of small-pox is fully discussed. Dr. Cameron holds that classification by vaccination marks after the manner of Marson is a sound system; whilst Mr. Wheeler maintains that it is illusory, contradictory, and unscientific. Let us, he says, range cases of small-pox under heads expressive of the various degrees of eruption—discrete, semi-confluent, confluent, virulent, and at once we find ourselves in contact with reality, and an order that is harmonious and scientific with predicable results.

Darlington, 20th June, 1881.

Sir,—Regarding you as much a public character as doctor, I may be excused, I hope, for asking a question, which the *Times* would not permit me to put through its columns.

In the *Times* of yesterday you say, "The most fatal of all the cases of small-pox recorded up to that date, 1830, are those which occurred in the old small-pox hospital, and even among them the deaths amounted to but one in twenty." Would you kindly tell me where the record spoken of can be seen. I have the early reports of the hospital, but not 1830. I have taken the liberty to send you a paper of Dr. H. Böens, which I think will not be tedious to read. May I in conclusion venture to ask you to look into the subject of small-pox and vaccination from a medical point of view. Is the disease (small-pox) altered in its character and fatality? Take a hospital. Look at the cases clinically. Leave out vaccination. Did Sydenham behold a disease different from that which you have in hospital wards to-day? Does it assume the same character, run the same course, carry off the same number of victims, and take the same erratic epidemic course? I would like to see you treat the subject scientifically and in "the light of recorded facts as means for ascertaining truth."

I believe you would come to a true result, which would be uniform in all experience, clear and unfailing; not to results baffling in their diversity and want of homogeneity.—I am, with respect, sincerely, ALEX. WHEELER.

Dr. C. CAMERON, M.P.

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80 St. George's Square, S.W.,
23rd June, 1881.

Sir,—The figures to which I alluded are given in Dr. Gregory's lectures on Eruptive Fevers, 1843 edition, p. 212. Dr. Gregory was physician to the small-pox hospital. As to small-pox being the same now as in Sydenham's time, I have no doubt as to its specific identity, but recorded statistics seem to me to prove increased virulence. I have received Dr. Böens' paper, for which thanks.—Yours truly, CHARLES CAMERON.

Mr. A. WHEELER.

Darlington, 26th June, 1881.

Sir,—I am obliged by yours of the 23rd. I have not the figures you give of Dr. Gregory's; but his article in Vol. I. of the Library of Medicine, 1840, p. 305, gives the epidemic of 1838, in which the "vaccinated" cases were 298, deaths 31. You see this is over one in ten, not one in twenty, so that your argument does not run with all the evidence, even taking it as given—Does it? And I do not think you can find any accuracy outside the classification by disease, instead of by vaccination. You say in your note that recorded statistics seem to you to prove increased virulence in the disease. Let me refer you to the enclosed Table.

The fatality of natural small-pox in Hospitals.

Authority.	Year.	Cases.	Deaths.	Deaths per cent. of cases.
Dr. Jurin, quoted by Dr. Duvillard, p. 112,	1723	18,066	2986	16·53
Duvillard, - - - -	1763	72	15	
An account of the Small-pox Hospital, London, 1763, -	1746 to 1763	6456	1634	25·30
Rees' Cyclopedia, -	1779	400	72	18·00
		24,994	4707	18·83
Marson, - -	1836-51	5652	1129	19·97
Metropolis, -	1870-2	14,808	2764	18·66
Do. -	1876	1470	338	23·0
Homerton, -	1871-7	5479	1065	19·43
Dublin, - -	1876-80	2404	523	21·7
Metropolis, -	1876-80	15,171	2677	17·6
		44,984	8496	18·8

There is no evidence there of increased virulence. The evidence points to no alteration. The disease is the same as regards fatality; and clinically it presents the very same features. The fatality of the different types is as nearly the same as absence of early statistics will enable us to say—Is it not so?—Yours respectfully, ALEX. WHEELER.

To Dr. C. CAMERON, M.P.

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80 St. George's Square, S.W.
27th June, 1881.

Sir,—The figures you send me are not at all new to me. I willingly accept them as recorded facts, but they are by no means all the facts which have been recorded. You ignore all that has been recorded as to the mortality in vaccinated and unvaccinated cases respectively at different periods during this century, and you ignore all that has been recorded in vaccinated cases divided according to the extent to which traces of vaccination remained. I suppose you know all about these; but they are recorded facts which probably do not suit your hypothesis, and you ignore them, exactly as the other side do many facts which seem to tell against them. That was precisely what I said in my letter to the *Times*.—Yours most obediently,

CHARLES CAMERON.

To Mr. A. WHEELER.

Darlington, 28th June, 1881.

Sir,—I am much obliged by yours. Do you not do me a slight injustice in saying I ignored the vaccinated? I quoted 298 of them from the epidemic of 1838. But of course the question was in another direction. You said you thought the small-pox was proved by evidence to be more virulent now than before 1830. There seems to me to be only two ways of proving this. First, by an appeal to the general mortality of the town and country, and secondly, by an appeal to the hospital statistics of the disease. I expect you know perfectly that the general mortality is not excessive in small-pox epidemics. In 1871, for instance, it was 200 per million less than 1875. I took this as settled, and as a generally accepted fact, namely, that when there was severe epidemic small-pox the death-rate was not very high. There only remains the appeal to hospital experience. This I gave as candidly as possible. Taking all the experience possible from the pre-Jennerian times, since Sydenham's improved treatment began, and comparing it

with our own, it seems conclusive that the disease is the same.

I may add that the figures I referred to of Dr. Gregory's have further bearing on the case; for they show that our hospitals are not curing fewer than they cured in epidemic times. I copy the table he gives.

	Unprotected. Admitted.	Died.	Vaccinated. Admitted.	Died.
Normal Small-pox :—				
Confluent, - -	295	149	56	21
Semi-confluent, -	78	8	42	4
Distinct, - - -	19	0	20	0
Normal, - - -	392	157	118	25
Abnormal Small-pox :—				
Confluent, - -	2	0	38	4
Semi-confluent, -	1	0	28	1
Varioloid, - - -	1	0	114	1
Abnormal, - -	4	0	180	6
Grand Total, -	396	157	298	31

Or a mortality of 27 per cent.

Am I not correct? Is not the small-pox just the same as Jurin, Massey, Wagstaff, and even Sydenham saw it? It seems to me that Dr. Latham's, Sydenham's, and Dr. Strugnell's clinical descriptions are of the very same disease in every feature.—Yours respectfully, ALEXR. WHEELER.

Dr. CHAS. CAMERON.

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80 St. George's Square, S. W.
30th June, 1881.

Sir,—If you will refer to my letter in the *Times* you will see that what I said was that "since vaccination had been introduced the mortality in recorded cases of small-pox in unvaccinated persons had steadily increased, though in a much smaller ratio than in vaccinated cases." You say that there are two means of proving this, the second of them the hospital statistics of the disease, and you enclose me Gregory's hospital statistics for 1838, which, though much too small a basis for generalisation, sufficiently illustrate what I said. According to the figures which you sent the other day, the death-rate in the 18th century was somewhere about 18 in every 100. In Gregory's unvaccinated cases in 1838, the death-rate is about 40 in every 100, and in the epidemics of 1870-80 it was 45 or 46. As to what I said about ignoring recorded facts, my remark seems to be amply justified by the circumstance, that while giving Gregory's table, you quite ignored the vast difference in his vaccinated and unvaccinated cases. As to your question about specific identity of small-pox, you will find that answered in my first note.—Yours very sincerely,

CHARLES CAMERON.

To Mr. A. WHEELER.

Darlington, 3rd July, 1881.

Sir,—This correspondence arose out of your letter to the *Times*, in which I understood you to imply that the disease (small-pox) was more fatal than formerly, *both to the vaccinated and to the unvaccinated*, and therefore on the whole more virulent. Your reply to my question on this point, says, "Statistics seem to me to prove increased virulence." And yet you say the disease is "specifically identical." I cannot understand the disease to be proved more virulent, and I gave facts to prove, as it seemed to me they did prove up to the hilt, that the fatality of small-pox is not a whit altered. You acknowledge the genuine result to be unaltered, I think. How can you then appeal to unproved classification to show any improvement to vaccinated, or detriment to unvaccinated? If the disease is the same, the cures equal in number, may we not fairly ask, how you come to fail of curing an equal number of unvaccinated, *now*, from what you cured before Jenner? The disease is the same, its general fatality unaltered. Then why not cure an equal number of unvaccinated? And when you find that your classification is absolutely defective, when you find no attempt to prove the fact as to the non-vaccination, when you find acknowledged vaccinated in large numbers classed as unvaccinated, you have, if scientific, to demand the utmost scepticism in respect of a division showing improvement, when general results are the same. You deal with an eruptive disease, which often, in bad cases, and *only* in bad cases, destroys the skin, effacing for a time any trace of vaccine cicatrices; this is the disease you deal with. You are well aware that in the "discrete" cases, no difficulty will be found in seeing the marks of vaccine. Know, that the difficulty of seeing these marks begins with the semi-confluent, and increases towards the confluent and malignant cases. And yet, you ask credence for the statements, that the classification by the marks is a correct classification! Are we to suppose that a claim so very bad, is serious? Are we to cast aside an explanation agreeing with *all the experience you can* gather, viz.—the classification by the eruption —for classification by "marks"? Surely, sir, you cannot seriously ask it? Interested officials of course can ask it: even honestly ask it, for we are blinded by our interest. But you have no interest but the public good, I think. The classification by eruption gives scientific results. These results may be predicted to great nicety in any large experience; must these not be true results and the right classification? The other gives no clue. You cannot find in it a rule applicable to experience at all, except this, that mild cases must of course show good marks, and that the worse the disease, the less distinct and visible the "marks" will be. I enclose an extract from a Birkenhead report, giving reasons from medical evidence, for distrusting the classification by marks. And I would remind you, that of 1376 children (Dr. Bridges' report, 1876) examined by Dr. Bridges', who had been successfully vaccinated, only 31 per cent. showed marks he thought suitable! Here is uncertainty, and the ground for every error. In the classification by eruption, all is regularity, order, precision. Is not this so?—Yours respectfully,

Dr. C. CAMERON, M.P. A. WHEELER.

Notes on the Small-pox Epidemic at Birkenhead, 1877 (p. 9). *By Fras. Vacher, M.D.*

	Vaccinated.	Unvaccinated.	Unknown.
	223	72	220
Died,	12	53	28

"As regards the patients admitted to the fever hospital or treated at home, those entered as vaccinated displayed undoubted cicatrices, as attested by competent medical witnesses, and those entered as not vaccinated were admitted unvaccinated, *or without the faintest mark. The mere assertions of patients* (!) *or their friends that they were vac-*

cinated counted for nothing, as about 80 per cent. of the patients entered in the third column of the table were reported as having been vaccinated in infancy."

Dr. Russell's Glasgow Report, 1871-2.

P. 25, "Sometimes persons were said to be vaccinated, but no marks could be seen, very frequently because of the abundance of the eruption. In some cases of those which recovered, an inspection before dismission discovered vaccine marks sometimes 'very good.'"

Metropolitan Asylums, 1870-2.

P. 1, "Of the 2763 deaths about 394 occurred within 48 hours after admission."

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80 St. George's Square, S.W.,
5th July, 1881.

Sir,—I have received your letter, and have again to remark that it illustrates the same determination to ignore recorded facts which do not square with your theory, to which I have more than once referred. The printed letter to the Manchester paper which you sent me the other day shows that you know all about the thousands of classified cases that have been recorded since 1836. They are divisible, in the first place, into cases (1) in which there was no doubt as to the fact of vaccination, marks being visible which bore witness to it; (2) cases in which there was a doubt as to the fact of vaccination, the patient asserting it, but no marks being visible; and (3) cases which had not been vaccinated. Classified thus, recorded statistics show that the mortality in the vaccinated cases is a mere fraction of what it is in the unvaccinated. But you do not accept this classification: you argue that in the most dangerous cases the eruption renders the vaccination marks invisible, and that therefore these cases are relegated to the class of the unvaccinated, whereby the mortality of that class is increased, and that of the vaccinated to the same degree diminished. Now I am willing to waive the point, though I do not see that the possibility of error from such a cause can make any substantial difference in the mortality in the resulting average. But it cannot seriously be contended that if the eruption allows the marks to be seen it can prevent them from being counted. It cannot be contended that if four vaccinal cicatrices are visible it must be because the eruption is milder, than if the physician could only discover three, two, or one. If vaccination has no effect on small-pox, the extent of the operation should make no difference, and the average mortality should be the same whether the marks showed that one, two, three, or four punctures had been made in vaccination. Now you must know very well that according to thousands of recorded cases this is not the case, that the thousands of cases that have been analysed show that in those which presented four marks the average death-rate was not a third of that in cases where vaccination had been performed in only one place. You can only get rid of this fact, or of all the corroborative facts taught by an analysis of these figures, by assuming that the observers have been unable to count, or that they have deliberately set themselves to work to fill up lies. If you put them aside on this basis you have still to throw overboard results of direct experiments on men and animals. Now I do not object to your rejecting what facts you like, only I do think it would have saved you a good deal of writing had you in your first letter expressed your intention to admit as facts only such recorded facts as suited your theory. As to my views of specific identity and increased virulence, there is nothing inconsistent in that. Those dwarfs. the Midgets, and Chang, the Chinese giant, are specifically identical, and yet Chang would prove a more potent enemy than many midgets. In conclusion allow me to guard myself by stating that in regard to several points your statement of my views is altogether inaccurate.—
Yours very sincerely, CHARLES CAMERON.

Mr. A. WHEELER.

Darlington, 10th July, 1881.

Sir,—Lack of opportunity has prevented me replying to yours of the 5th before now. More than once, and now again, you tell me I ignore what you call "recorded facts which do not square with my theory." I wish I could make it plain that I have no theory. It is my belief that theories have done great harm in this connection, and my sole desire is to show that the theorising of the vaccinators does not accord with "recorded facts," and therefore to help to clear my country of the expense, trouble, and wrong of supporting false theories. What I must insist upon as to the vaccinated, is, that in no case does the classification you accept prove to be scientific. If it was scientific it would apply to any experience. And in your letter to the *Times* of 20th June, you point out that in three, four, and more marks cases, the experience of 1852-67, does not fit with the experience of 1870-79. But I offer to recall you to your own eminent Sydenham, for the scientific observations which will fit with all experience, and you say I "ignore" the other! Would you say that Galileo ignored the solid mountains and the everlasting hills, because he insisted that the theory that they were fixed was wrong? Even so, I, having examined most carefully the hospital records, find no parallelism in them, as stated in orthodox fashion. But I find their experiences all run into order and scientific exactitude if you will but follow the great men of your own profession. If "four marks" cases always yielded a certain fixed per centage of cases and deaths; if these were followed by "two marks" cases showing also a certain fixed per centage of cases and of deaths; if one and three marks cases followed again a strict and regular experience, and if these were always milder than the experience of a hundred years ago; if when you had a great many vaccinated you had on the whole fewer deaths; and fewer still as the vaccinated proportion rose; then I could admit that you should classify by marks; and that you should classify by counted marks; but as you know, I presume, this is not to be shown. If you go by marks all experience differs, no two hospitals show the same results; all is confusion. While all the time, the classification by disease and by eruption shows the disease to be the same, the cures the same, the fatality the same. I come back therefore to the scientific conclusion, 1st, that small-pox is unaltered; 2nd, that vaccination is unable to influence either the disease or the fatality. I "throw aside" no facts. I willingly accept all. I only ask you to be good enough to accept the actual results which all these facts teach us; and not insist on an impossible attempt to screw these facts into harmony with theories which can only be even partially maintained by entirely ignoring half the experiences and facts. It may seem curious to you—to me it is clear—that those who desire to judge the whole case by dividing the

evidence with an uncertain line, and treating the thus divided classes separately, whether they judge it by the vaccinated, or the unvaccinated, thus produced, ignore the great results as completely, as—to revert to Galileo—did those who wished to decide the inferiority of the solar system by the apparent stability of the earth. Let each draw his own conclusions in a controversy, but I must ask that my statements may be treated in good faith, as I hope I have treated those of the authorities I quote.—I am respectfully,

Dr. C. CAMERON. ALEX. WHEELER.

The following table shows what I say of the marks, and of the eruption.

HOSPITALS.		One Mark Cases.		Two Marks Cases.		Three Marks Cases.		Classification by Eruption. Deaths per cent.		
		Cases.	Deaths per cent.	Cases.	Deaths per cent.	Cases.	Deaths per cent.	Discrete.	Confluent.	Malignant.
Homerton,	1871 to 1877,	1042	12	1259	8	1261	5	1	24	94
Glasgow,	1870 to 1872,	313	10	161	8	17	0	No account.		
London,	1870 to 1872,	1124	15	1722	11	1677	8	No account.		
Philadelphia,	1872 to 1873,	1142	19	180	12	355	11	No account.		
Dublin,	1876 to 1880,		No such	classification.				1	38	77
Fulham,	1878	149	12	156	4	202	4	1	38	76
Stockwell,	1879		No such	classification.				2	26	100
Deptford,	1878 to 1879,	317	11	384	6	447	4	2	49	100

This shows, as far as London is concerned, that there are more cases in the two and three marks columns than in the one. If taken age by age, the irregularity becomes a complete muddle in the "marks" columns.

A. W.

80 St. George's Square, S.W.
11th July, 1881.

Sir,—I have received your letter and am quite content to allow the statistical table you enclose to answer your arguments. You reject the classification of marks as artificial, but accept that according to eruption because you assert that it "shows the disease to be the same, the cases the same, the fatality the same." A reference to your table will show that the fatality in the discrete cases in the different groups varies from 1 to 4 in every 200, and in the confluent from 24 to 49 in every 100—a very much greater variation (or muddle, to use your own phrase) than is observable in any of the other groups. The classification according to number of cicatrices may or may not be scientific, but the figures selected by yourself show that in close on 4000 cases with three marks the mortality is only about one-third of what you say it was in small-pox before vaccination was invented; and that in nearly so many more cases with two marks it was less than half what you say it was before vaccination was invented. With these facts before you in your own table you arrive at the "scientific conclusion" that "vaccination is unable to influence either the disease or the fatality." To me it seems that arguing in the same fashion I might with equal reason arrive at the scientific conclusion that 2 and 2 make 5, or that the propositions of Euclid are from beginning to end one mass of erroneous theories.—Yours very sincerely, CHARLES CAMERON.

Mr. A. WHEELER.

Darlington, 12th July, 1881.

Sir,—Yours to hand. I am quite content to leave the correspondence where it is. I am sending it to the *Vaccination Inquirer*, a course to which you will, I expect, have no objection.—Yours respectfully, ALEX. WHEELER.

Dr. C. CAMERON, M.P.

MR. WM. YOUNG delivered a lecture entitled, "Vaccination—a Failure, a Fraud, and a Crime," at the Progressive Club, Notting Hill, on 26th June—Dr. Nichols in the chair. At the close of the lecture many questions were asked, and the subject elucidated by Mr. R. O. Fitch, Mr. Ashman, and the Chairman. Although invitations had been sent to Drs. Drysdale, Carpenter, and other upholders of compulsory vaccination, no opposition was attempted.

THOUGHTFUL GUARDIANS.—At a recent meeting of the Shoreditch Board of Guardians, the following resolution, on the motion of Mr. Lucraft, was carried—"That no application to the Magistrate for a summons against any person for non-compliance with the Vaccination Acts, be made without the immediate and direct order of the Board, and to read and rescind any resolution to the contrary."

PROGRESS IN SWITZERLAND.—The contest against enforced vaccination in Switzerland is making encouraging progress under the auspices of the Swiss Anti-Vaccination League, which association was represented at the Congress by Herr Prieswerk. In, Geneva the most enlightened canton in Switzerland, and perhaps the most intelligent of all continental communities, there is no Compulsory Vaccination, though medical men have spared no effort by publishing misleading statistics to get it adopted. In the canton of Zurich, vaccination has been rapidly falling into disuetude. In 1851-2-3 88 per cent of the children were vaccinated, and the deaths of infants under one year were 28 in each 1000 births, while in 1876-7-8 when only 50 per cent were vaccinated, the deaths were reduced to 20 in each 1000 births, a diminution of 8 per cent.—*From Mr. W. Tebb's Address on the International Anti-Vaccination Congress at Paris.*

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 30.] SEPTEMBER, 1881. [Price 1d.

NOTES OF THE MONTH.

"A Disgrace to Humanity!"—Such is the London Society for the Abolition of Compulsory Vaccination according to Mr. Benjamin Barrow, Surgeon, Justice of the Peace, Mayor of Ryde, and President of the recent annual meeting of the British Medical Association. Mr. Barrow thinks the law not stringent enough, and would leave it to no one's option to remain unvaccinated. Very well, say we: Make a beginning: call in the policeman to help the doctor. The project is often threatened: why not attempted? Mr. Barrow is, we apprehend, not very strong in the head, and is more apt at gush than matter-of-fact. His address to the Association at Ryde was very "mixed"—a curious jumble in which piety, poetry, and gossip were in intolerable excess of science. "Has any man," he asked, "approached Edward Jenner as a benefactor to the human race?" and described him as "One who by self-sacrifice of every description, by an unparalleled perseverance, by an unflinching determination of many years' duration, at last convinced the world that the plague of small-pox was to be combated by the simple process of vaccination." Such words are sheer rant, answering to little or nothing in the story of Jenner.

It is amusing to observe the readiness with which the unscientific literary class flop upon their knees at anything in the name of Science. It is the etiquette of the vulgar among that numerous body. For example, a writer in the *Christian World* of 11th August, professes to have been "stimulated" by Pasteur's lecture at the Medical Congress, and inspired with the hope that "the force of many fearful diseases may be broken by vaccination." He then goes on to relate the current story of the fifty sheep, twenty-five of which, he says, "were vaccinated" (meaning inoculated) and did not die, whilst twenty-five that had not been vaccinated died *every one;* adding, "If a fact like that does not convince, it would be vain to follow it up with arguments"! Convince whom? and convince of what? No one requires to be convinced that the animal economy when under the influence of one sort of fever may not be susceptible of another sort; but when one fever goes off, another may come on—as those who demand frequent or annual vaccination for protection from small-pox clearly allow. To save Pasteur's sheep from the fever that killed them, it would, on his own theory, have sufficed to keep them from eating the grass growing over the bodies of their buried comrades; and surely it would be easier to do so than to incur the risk and trouble of their inoculation. From of old savants have been remarkable for achieving simple ends in roundabout ways and expecting the world to be astonished. Moreover the writer in the *Christian World* should know that it takes time to test reports like Pasteur's, and that the story of science is strewn with the wrecks of sensational discoveries and inventions.

Deeds speak louder than words, and the resolution in favour of the adoption of what is called "calf-lymph" by the British Medical Association at Ryde, testifies forcibly to the knowledge of the evils of vaccination by the medical profession. It is, we may be sure, for no slight cause that men whose tendencies are strongly conservative, should recommend the overthrow of the existing system of vaccination, and pronounce a virtual condemnation of the practice of the Medical Department of the Local Government Board, and the honeyed assurances of such officials as Dr. Stevens and Dr. Ballard. Calf-lymph, if adopted, will in turn be found out; but in any case the agitation is a presage of good, and that truth long denied will have its way at last. Mr. Sclater-Booth was wiser than he knew when he predicted that the calf-

lymph agitation, if not conducted with more discretion, would bring the whole vaccination fabric to the ground. Dr. Haughton did excellent service at Ryde in compelling an unwilling audience to listen to a variety of disagreeable facts; Dr. Carpenter of Croydon interrupting him with references to anti-vaccination societies, and Dr. Grimshaw of Dublin charging anti-vaccinators with causing the recent epidemics of small-pox! Such imputations are too absurd for discussion, but they serve to show how powerfully and how widely a little truth, firmly maintained, affects a great mass of error, fortified and consolidated though it be with all the prestige of the State.

VACCINATION has gone to the dogs, or rather returned to the dogs. The old notion has been revived that it saves dogs from distemper as well as men from small-pox. "Canine Vaccination" has made its appearance on the signboards of veterinary surgeons. "Anything to turn an honest shilling," as an enterprising vet remarked. If the craze should spread, we may perhaps receive an answer to the question, What is the substance inoculated that prevents distemper? Is it cow-pox? Is it small-pox inoculated on the cow after Ceely's fashion? Is it small-pox? Is it horse-pox? Is it horse-pox cow-pox? Or is it an indescribable "blend" got off generations of human arms? It is idle to say that vaccination stops distemper, if the character of the vaccination be undefined. Vaccine lymph, as it is called, may be one of many things, and unless we are to walk into humbug with open eyes, we must know which. The answer long deferred and evaded by every dodge in the case of the human species, we may get by the dogs. They are vaccinated for distemper—With what?

MR. FAWCETT, the Postmaster General, is a man of more than average good sense, and yet in his Annual Report he makes himself responsible for the absurd assertion that the London postmen have been preserved from small-pox by reason of their re-vaccination. It goes without saying that the postman's calling is an extremely healthy one. He has abundant exercise in the open air, and, the discipline of the office being strict, his life is regular beyond that of the majority of working-men. Starting with a good constitution, maintained by exercise and sober habits, and past the age at which small-pox is most prevalent, why should the postman be otherwise than exempt from what is comparatively a rare form of disease? It will be said, the postman has to deliver letters at infected houses, but at how many such houses? Small-pox at its worst, is never diffused over London, and the poor folk who suffer from the disease, have few dealings with the post-office. Moreover, if the testimony of those who are responsible for small-pox hospitals is worth a straw, such a possibility as catching small-pox from the delivery of a letter at an infected house, is not worth consideration. In short, the assumption that postmen are probable subjects of small-pox, and are saved from it by vaccination, is one of those audacious fictions by which a lucrative superstition is maintained; and it is little to Mr. Fawcett's credit that he should blindly lend his authority to the imposture.

IT suits vaccinators to speak of small-pox as equally diffused throughout the population of London, and as if all and sundry stood in common peril, and that safety was only to be found in periodical vaccination. On the contrary, we say that small-pox is conditioned in overcrowding and stench, and that whilst vaccination can be nothing but mischievous, security from the disease rests with those who dwell in wholesome circumstances. Nor will our contention be liable to dispute by those who carefully examine the facts as to the personal incidence of small-pox in times present and times past. Here for example is a summary from the Report of the Registrar-General of the place of death of the 475 persons who died of small-pox in London in the course of 1880—

DISTRICTS.	DEATHS FROM SMALL-POX.	IN HOSPITALS AND WORKHOUSES.
North, ...	185	... 176
Central, ...	4	... 2
South, ...	166	... 160
East, ...	67	... 34
West, ...	53	... 53
	475	425

Thus we see that of 475 no more than 50 were suffered to die in their own beds. The statement bears its lesson on its face. These were poor people from the poorest parishes, many of them homeless or of the pauper class. Mr. Marson started the doctrine that the risk of small-pox might be estimated by the number of vaccination marks; but the test was whimsical and the results hopelessly contradictory. We should understand much more about the risk of small-pox if we knew the rent per week paid by

each sufferer, and in the case of children, the rent paid by their parents. It would be discovered with some surprise, we daresay, that rent and small-pox in London are curiously and intimately related.

WHAT can it mean? An Amended Return of Persons Imprisoned and Fined for Non-Compliance with the Vaccination Act moved for by Mr. Leonard Courtney has just been issued. The original Return, moved for by Mr. Otway and issued last year, was so grossly imperfect that it was good for nothing but waste-paper; and, with some trifling improvement, the Amended Return is little better. What adds to the mystery is that along with Otway's Return weighing 1½ ounces, appeared a much fuller Return, moved for by Mr. Barran, weighing 18 ounces. Even Barran's Return is defective on every page, but what was meant by the laborious futility of Otway's Return, and by the amended futility of Courtney's is beyond our power to divine. It would appear as if two sets of clerks were set to work to obtain and tabulate the same information; that they worked and produced their returns in ignorance of each other; that one set was more efficient than the other, and produced the better Return; and that the worse was reproduced as amended without reference to the better, and still inferior to it. Such is Government work, waste, and ineptitude!

FROM the 10th Annual Report of the Local Government Board we learn that the cost of public vaccination in England and Wales for the year 1880 was as follows—

Fees and Expenses, -	£86,879	0	0
Extra Awards to Public Vaccinators, - -	12,762	8	0
Total, - -	£99,641	8	0

Nearly £100,000 for the vaccination of the poor, or about 4s. a head for each infant operated upon! Look at it as we will, it is a handsome endowment of the medical profession—such an endowment as no corporate body ever did surrender save by external compulsion. To this sum has to be added the much larger amount derived from the vaccination of the children of the middle and upper classes. We do not impute to medical men worse motives than characterise their fellow-creatures when we ask whether in receipt of such gains they can be expected to judge impartially in the question of vaccination? and whether with pockets full of fees their cries for re-vaccination, and frequent vaccination, and compulsory re-vaccination are not kindred with the shouts of other tradesfolk for increase of custom?

POOR Dr. Carpenter! The *Zoophilist* for August contains an exposure of his inaccuracy, to use a mild word, which we might have thought incredible, but for our own experience. In his examination by the Commission on Vivisection, he was asked whether he approved of the experiment of injecting boiling water into the stomach of a live dog, described in the seventh edition of his *Human Physiology*. He disowned the imputation; professed complete ignorance; and threw the responsibility upon Mr. Power, the editor of the seventh edition of his Manual. Yet on examination it proves that in the fifth edition compiled by Dr. Carpenter himself alone, the incriminated experiment is described word for word as in the seventh edition! As the editor of the *Zoophilist* says—

"The experiment of which Dr. Carpenter declares that he has never heard, with the very line of research connected with which he protests he is altogether unacquainted, and the account of which he assures the Commission has been inserted in his work since he himself had ceased to have any control over it, was, in plain truth, recorded by himself in the identical words in which the record was quoted to him; and that not as a mere interpolation in a chapter already written, such as might possibly have escaped a not very tenacious memory, but as an important feature of an entirely re-written section, recast expressly with the object of fully developing in this, the latest edition issued personally by Dr. Carpenter himself, the line of inquiry to which it refers."

To come to our own business, however. Here we have Dr. Carpenter again! In his letter to the *Spectator* of 23rd April, he says—

"During my scientific visits to the Mediterranean in 1870 and 1871, I was assured by one of the principal physicians of Malta that notwithstanding the freedom of communication between Valletta and all ports in the Mediterranean, the large population of the island had been for many years totally exempt from small-pox: the liability to which had been (as he believed) practically extinguished by the universality with which vaccination had been there practised for many years under the rule of a benevolent despotism."

A Surgeon-Major writing in defence of vaccination in the *Westminster and Chelsea News* of 16th July says—

"At Malta, in the years 1870 and 1871, I was in medical charge of Royal Artillery, in number all told of about 430. Small-pox broke out in a very severe form in Valletta and Vittoriosa, the towns in which the troops were chiefly quartered."

Thus at the very time when Dr. Carpenter avers the Maltese physician was assuring him the liability of the population to small-pox was extinguished, the disease "broke out in a very severe form." We said last month that Dr. Carpenter was not an antagonist to be taken seriously, and these fresh evidences of his imaginative ability re-enforce our opinion.

THE INTRODUCTION OF VACCINATION TO THE UNITED STATES.

THE introduction of vaccination to practice is sometimes described as having been a labour of difficulty, a strife with prejudice, a victory of light over darkness; but there was nothing in reality answering to such magniloquence. The battle was won for vaccination by variolation, for which it was exhibited as a harmless and more efficient substitute. Unless the entrance of vaccination into the place of variolation be recognised, its quick and easy triumph is inexplicable. A novelty that King George and Queen Charlotte, the Prince of Wales, and the Royal Dukes accepted without hesitation or reserve could not in the nature of things have required the exercise of much intelligence. Any serious resistance proceeded from the variolators, who considered their craft in danger when parsons, women and tradesmen were approved of as vaccinators by Jenner himself. Such opposition to vaccination as is common at this day was not possible in the early years of the present century. We know that health is the best defence of health, and that illness is proof of ill-living; but to our forefathers illness was a mysterious dispensation to be encountered with submission, relieved by prescriptions magical and natural. Hence not only dull Royalty was involved in the cow-pox craze, but men of science like Davy, Wollaston, and Darwin, with the whole troop of men of letters, of whom Sir Walter Scott may be taken for spokesman. Describing Queen Caroline in the *Heart of Midlothian*, he says—

"The lady had remarkably good features, though somewhat injured by small-pox, that venomous scourge which each village Æsculapius (thanks to Jenner) can now tame as easily as his tutelary deity subdued the Python."

For credulity thus expressed there was large excuse. What else, indeed, could one in Scott's position have been expected to believe? It was only through the harsh disenchantment of experience that vaccination did not prevent small-pox, nor mitigate its severity, nor was in itself harmless, that the early delirium abated, and a less rabid persuasion supervened.

The wave of conviction spread from England over the world, and nowhere was the substitution of vaccination for variolation welcomed more enthusiastically than in New England. As Boston led the way in 1721 in the practice of small-pox inoculation, so from Boston in 1800 was announced the project for the extermination of small-pox by cow-pox. But ere advancing farther, it may be well to say a word about Boston small-pox.

Boston was an extremely unhealthy town. For fifty years, from 1701 to 1750, the births were exceeded by the deaths. In a population of about 15,000, the annual death-rate ranged from 30 to 70 per thousand. There were epidemics of fever and of small-pox; the latter occurring in general at intervals of ten years, when large numbers died, the small-pox as usual displacing other forms of fever, but nevertheless raising the mortality of the year. The most deadly outbreak of small-pox was that of 1721, the year in which Cotton Mather and Zabdiel Boylston introduced variolation. The mortality of that year was 1102, of which 884 were ascribed to small-pox. In 1752 there was an extraordinary epidemic, and how much of its prevalence was due to circumstance and how much to contrivance, it is impossible to divine. Here are the figures, which are of singular interest—

BOSTON in 1752. Population 15,684.

	Had Small-pox.	Died.	Were Variolated.	Died in consequence of Variolation.
Whites,	5060	470	1985	24
Blacks,	485	69	139	6
Total,	5545	539	2124	30

Fled from Boston for safety.	Had neither Small-Pox by nature or art.	Had Small-Pox either by nature or art.
1843	174	5998

Under these heads the entire population of 15,684 was accounted for, with the important exception of the discrimation of the 5998, whose immunity was pre-supposed, into subjects of induced and of spontaneous small-pox. The deaths, 569, were less numerous than in 1721, when 884 died, but the disease was more widely diffused, upwards of one-third of the inhabitants, 5545, being attacked. The epidemic exhausted itself within four months, the record standing thus—

January,	died	1	June,	died	203
February,	,,	2	July,	,,	31
March,	,,	2	August,	,,	5
April,	,,	119	September,	,,	1
May,	,,	205			
					569

The diffusion of the epidemic was largely due to the extensive variolation that went on, no fewer than 2124 having been inoculated in the panic, and they moving about freely in the assurance of safety, spread the distemper on every side. For every five who had the small-pox, so to say, naturally, two had it artificially, and the one sort was almost as "catching" as the other. It was an instance of a community (excepting the 1848 who fled) rushing into small-pox to escape small-pox. The deaths of 24 Whites and 6 Blacks from variolation gave rise to much concern, and by some they were spoken of as so many murders. Against this fatality was, however, set the low death-rate of the regular sufferers, 539 out of 5545, or less than 1 in 10. The Rev. T. Prince, who communicated an account of the epidemic to the *Gentleman's Magazine*,* was puzzled to account for the variation from the London standard—

"Dr. Jurin computes that there generally die in London in the natural way 2 in 11 or 18 in the 100; but in Boston we see that not more than 1 in 10 died; whilst in the inoculated way the deaths were more numerous than is commonly allowed. What were the natural causes, under their Divine Director, of small-pox in the natural way being less mortal in Boston than in London, and more mortal in Boston than in London in the inoculated way, may be worthy of our humble inquiries."

* For 1753, p. 413.

The difference was broader than Prince perceived. An outbreak of small-pox in which a third of the population was affected never occurred in London, and a mortality proportionate with that of Boston among a third of the Londoners would have appeared like a recurrence of the Plague. We are in nowise concerned to minimise the ravages of small-pox when conditions are prepared, as of design, for its development; but we do insist on their accurate definition. Boston suffered severely, but was by no means "decimated"—the invariable rhetorical phrase. The deaths were at the rate of 1 in 27, and, as observed, small-pox replaced other forms of fever. The 569 deaths from small-pox were not extra deaths; the excess was less than half that number, and might fairly be attributed to the extraordinary energy displayed in propagating the disease by inoculation.

Spite of such adverse experience, variolation continued to be a common, though intermittent, practice in America, and especially in New England, where the habit of doctoring for the cure of present ailments, and the prevention of anticipated ones, was established and inveterate. In Boston the practice became systematised, and the inoculated were confined for three weeks to an hospital situated on a promontory in the Charles River, where they were treated as veritable centres of infection—a course widely different from that pursued in the epidemic of 1752. Nevertheless, it is not to be supposed that small-pox was ever endemic in New England as it was in London. Dr. Waterhouse writing in 1787 observed—

"I do not believe there is at present a single person infected by small-pox in all the four New England Governments, that is, not one in a million of people."

The disease broke out now and then, and was always traced to some wayfarer, or ship, or parcel of goods—never to bad drainage, or no drainage, or the stenches that pervaded the domestic interiors of last century, whether in America or Europe. In this matter, the exercise of a little imagination is requisite to realise the historic facts: they are disagreeable; but if people will insist on comparing the small-pox of the 18th century with that of the 19th, it may become necessary to be explicit as to certain domestic details concerning which there is a conventional reserve.

It was by Dr. Benjamin Waterhouse, Professor of the Theory and Practice of Physic in the University of Cambridge, Massachusetts, that vaccination was introduced to America. He described the new rite in the *Columbian Centinel* of 12th March, 1799, as "Something Curious in the Medical Line"; and formally promulgated the novelty a year afterwards in a pamphlet thus entitled—

"*A Prospect of Exterminating the Small-Pox; being the History of the Variolæ Vaccinæ, or Kine-Pox, commonly called the Cow-Pox, as it has appeared in England: with an Account of a Series of Inoculations performed for the Kine-Pox in Massachusetts.* Printed for the Author at the Cambridge Press by William Hilliard and sold by him and other Booksellers in Boston. 1800."

Kine-Pox! Why Kine-Pox? The reason is stated by the Doctor—

"From kine the plural of cow; thus in the Scriptures, 'And they took two milch-kine, and shut up their calves at home'; a word equally expressive, and, in the opinion of some, more delicate."

There we have it: *More delicate!* If it had been bull-pox the objection might have been insurmountable. Writing to Jenner, 24th April, 1801, Waterhouse says—

"Could you believe that not a single inoculation with cow-pox has yet been effected in Philadelphia? It seems that the leading physician there pronounces it too beastly and indelicate for polished society."*

The pamphlet on Kine-Pox set forth the mystery of the new inoculation as received from England with a significant omission—there was not a word in it about Horse-Grease! Waterhouse was in correspondence with Pearson, and Pearson may have told him how not only the asserted generation of Cow-Pox in Horse-Grease was discredited, but "how it was like to damn the whole thing"; which might have been true enough, but if true, Where then stood Jenner? He knew that cow-pox did not prevent small-pox: the fact was notorious among the medical men in cow-pox districts: and he had expressly pledged his faith in the *Inquiry* to Cow-Pox begotten from Horse-Grease, and to nothing else. But Horse-Grease Cow-Pox did not suit the market, and it was withdrawn with Jenner's tacit assent, and spontaneous cow-pox advanced in its stead, and accepted as Jenner's veritable discovery. It might be good business to drop the horse out of the case, but what was it else?

Cow-pox, testified Waterhouse, was unknown in New England, but he received the revelation concerning it at once—but *not*, be it repeated, Jenner's revelation: *that* he suppressed. He had long suspected that small-pox was communicated from brutes to the human race; and now his suspicion was confirmed. And, such being the origin of variola, it seemed to him not unreasonable that the disease as it existed in a mild form in kine might be used for inoculation with all the advantages pertaining to small-pox, whilst attended with neither injury to the inoculated, nor with risk of infection to those about them—

"What makes this newly discovered disease so very curious, and so extremely important is, that every person thus affected, is ever after secured from the ordinary small-pox, let him be ever so much exposed to the effect of it, or let ever so much ripe small-pox matter be inserted into the skin by inoculation. In other words, a person who has undergone the local disease and specific fever occasioned by the cow-pox infection is thereby rendered ever after unsusceptible of the small-pox."

How incautious, to say the least, was this prophecy of perpetual security! With less than

* Baron's *Life of Jenner*, Vol. i. p. 442.

three years' experience an absolute prediction was delivered, received, and repeated over the whole earth as if by parrots. Such, however, is the habit of mankind when possessed by a strong delusion.

In justice to Waterhouse it has to be said that he did not commit himself openly until he had gone through the illusory experiments that were then fashionable in England. He had much difficulty in obtaining a supply of active virus. Several remittances failed, but at last he had one, an inch and a-half of infected thread, from Dr. Haygarth which proved, it was thought, effective.* His first patient was his son, Daniel Oliver, aged five; then another child aged three; then a servant lad aged twelve; then a weaned infant of one year—all five successful; whilst two domestics failed "to take"—seven experiments in his own household. Then he had the children taken to the Small-Pox Hospital where they were inoculated by Dr. Aspinwall, and issuing scatheless from the test, the truth was taken as demonstrated, and there was no need for further hesitation. Four gentlemen, including a physician, offered themselves for public encouragement—

"One of them," says Waterhouse, "chose to live pretty freely by way of experiment, and the febrile symptoms, especially headache, were full as much as he could bear and walk about with. This convinced me that the Kine-Pox was a disease not to be trifled with."

Waterhouse then appealed to the pride of his countrymen—

"The people of New England, particularly of Boston, set a noble example to their elder brethren of Old England, in adopting the Turkish practice of inoculation for the small-pox in 1721. Now the English in their turn, lead the way in a practice still more salutiferous. For though the inoculation which commenced here in 1721, stripped that horrid disease, the small-pox, of more than half its terrors, yet it is the Kine-Pox that will effect its extermination."

Following this daring prophecy came a frank request for business—

"Dr. Waterhouse informs those who have applied to him out of Cambridge to inoculate their families that he declined it only until the disorder had gone fairly through his own family, and until some of them had been inoculated by Dr. Aspinwall, and otherwise exposed to small-pox. But having now confirmed his assertion, that the Kine-Pox protects the constitution from the infection of small-pox by a fair experiment, he is ready to attend them whenever they choose. Those who live in Boston may rest assured that from the proximity of his residence to the capital, he shall make such arrangements as to be able to attend them as punctually as if he resided there.—CAMBRIDGE, 18*th August*, 1800."

The operations, so hopefully begun, came speedily to grief. In a letter addressed by Waterhouse to Jenner, 24th April, 1801, we read—

"One inch and a half of infected thread from Dr. Haygarth was the whole stock from whence perhaps 3000 persons have been inoculated, *but I fear the greatest part of them have been spurious.* I gave out that the winter was an unfavourable season for this new inoculation, and by that means I suspended the practice throughout the country until the arrival of fresh matter and your letter. Now we are going on again, but not with the faith and spirit of the last season. Some unlucky cases have damped the ardour of a people who received this new inoculation with a candour, liberality, and even generosity, much to their credit. The first political and literary characters in our nation are still warm advocates for the practice."*

Waterhouse continued to correspond with Jenner, and was regarded as his accredited representative in New England. Writing to Dr. Lettsom, 16th November, 1802, he says—

"Dr. Jenner has just sent me a present I highly prize—a silver box inlaid with gold of exquisite taste and workmanship, bearing this inscription—

EDWARD JENNER to BENJAMIN WATERHOUSE.

But Mr. Ring annexed the superscription in rather an hyperbolical style—

From THE JENNER of THE OLD WORLD to THE JENNER of THE NEW WORLD

Long will it remain among the sacræ relictæ of my family."†

Waterhouse was a man of an ingenious turn of mind. When troubled with ill-results from his operations at the end of 1800, he tried what has since been called retro-vaccination, probably for the first time. Here are his words from his letter to Jenner, 24th April, 1801—

"I inoculated one of my cows with the vaccine virus, and obtained from her a crop of matter on the ninth day, which produced the disease in the human subject to perfection. Is this experiment known among you? As I operated myself there was no avenue opened for deception in the whole experiment."

A sentence which follows is too characteristic to be passed over. Says Waterhouse—

"I have invariably found that weakly children have been benefited by the vaccine inoculation, and some it has cured of the hooping-cough."

And this after less than twelve months' experience!

Waterhouse has also to relate a case of cows having small-pox—

"At one of our periodical inoculations, which occur in New England once in eight or nine years,‡ several farmers drove their cows to an hospital near a populous village, that the patients might have the benefit of their milk. The cows were milked by persons in all stages of small-pox; and in consequence they had an eruptive disorder on their

* "It was Dr. Lettsom who first sent the vaccine lymph across the Atlantic, and consigned it to the fostering care of his friend Dr. Waterhouse."—Pettigrew's *Life of Lettsom*, Vol. i. p. 121. "Dr. Waterhouse at length succeeded in getting some cow-pox matter from Dr. Haygarth of Bath, who forwarded it from Bristol."—Baron's *Life of Jenner*, Vol. i. p. 386.

* Baron's *Life of Jenner*, Vol. i. p. 440.

† Pettigrew's *Life of Lettsom*, Vol. iii. p. 405.

‡ As Dimsdale advised, the inhabitants of a village or district were inoculated with small-pox simultaneously so that all being infected none should be unwillingly infected!

teats and udders that everyone in the hospital, as well as the physician who told me, declared was small-pox. Since cow-pox has been talked of, this account has been revived and credited. Have you found anything like it in England?"

Waterhouse had inquiries from Virginia, and wished Jenner to let him have, if possible, a picture of the vaccine vesicle on the negro—

"Could I procure two or three coloured plates, delineating the appearances on the skin of the negro, I would send them into such of our Southern States as are blackened by these degraded beings."

"Some in this country, as well as in England," observed Waterhouse, "having had all their objections to Kine-Pox obviated, persist in asking, 'Who can tell what may be the consequences in the lapse of years of introducing a bestial humour into the human frame?' I answer them as does Mr. Ring with a spirit and wit worthy of Franklin, 'Who can tell what may be the consequences in the lapse of years of introducing milk, beef steaks, or mutton chops into the human frame?"

The pertinacity with which this "wit" was employed by the early vaccinators leads us to suppose that they found it effective; but was ever argument by analogy more absurdly misapplied? Milk or steaks from a cow, or chops from a sheep known to be suffering from pox would be rejected with loathing; nor was it ever proposed to cook and eat cow-pox; and yet corruption, mere association with which, would render milk, or steaks, or chops loathsome, it was not thought abominable to infuse into the blood!

"The first political and literary characters in our nation are warm advocates of the practice," said Waterhouse; and it was so. President Adams was quite of a mind with King George in that respect; and Jefferson not only approved of the practice in common with Queen Charlotte, but, as soon as he could obtain virus, set to work with his sons-in-law, and vaccinated their families and neighbours to the number of two hundred. There is a letter from Jefferson to Jenner in 1806, which is remarkable as an absolute confession of faith at a date when much had occurred to shake faith. The President wrote—

"MONTICELLO, VIRGINIA, 14*th May*, 1806.

"Sir,—I have received the copy of the evidence at large respecting the discovery of the Vaccine Inoculation, which you have been pleased to send me, and for which I return you my thanks. Having been among the early converts in this part of the globe to its efficacy, I took an early part in recommending it to my countrymen. I avail myself of this occasion to render you my portion of the tribute of gratitude due to you from the whole human family. Medicine has never before produced any single improvement of such utility. Harvey's discovery of the circulation of the blood was a beautiful addition to our knowledge of the animal economy; but on a review of the practice of medicine before and since that epoch, I do not see any great amelioration which has been derived from that discovery. You have erased from the calendar of human afflictions one of its greatest. Yours is the comfortable reflection that mankind can never forget that you have lived. Future nations will know by history only that the loathsome small-pox has existed, and by you has been extirpated. Accept the most fervent wishes for your health and happiness, and assurances of the greatest respect and consideration.

"TH. JEFFERSON."

That small-pox should be erased from the calendar of human afflictions, and be known only in history as extirpated by Jenner, were vain expectations; but to recognise their vanity did not lie within Jefferson's possibilities. He had been bred in the belief that inoculation with small-pox prevented small-pox, and it came forth as a corollary that as cow-pox was an equivalent for small-pox, if all were cow-poxed, the disease must be extirpated. His expectations, therefore, were not without plausibility. Nor was it possible for Jefferson in the light of his time to see that small-pox was no specific entity that could be got rid of *per se* whilst all else remained unaffected. We know that if even vaccination made an end of small-pox, and did no harm of itself, we should reduce neither illness nor mortality (supposing no other change in the conditions of existence were effected) but should have our due allotment of disease in other forms. To attack small-pox as small-pox, and suppose that if suppressed we should be in anywise advantaged, is mere illusion. Zymotic diseases to be dealt with effectually, must be dealt with as forms of a common malady; to get rid of one, we must get rid of all; and with a graver sense of the difficulties to be encountered we, too, believe with Jefferson, that small-pox may be extirpated, but in company with much else, and by practice that has no affinity with the creation of disease as implied in vaccination.

Of all people, the English are most abandoned to medical quackery, said Lady Mary Wortley Montagu; and the English characteristic was reproduced and exaggerated in New England. The first resistance to vaccination being overcome, there was a run upon the practice—

"The zeal of American medical men," says Baron, "was excited to an unparalleled degree; but, unfortunately, their discretion did not keep pace with it. They disregarded the cautions of Dr. Waterhouse, and paid no attention either to the state of the matter with which they inoculated or to the progress of the pustule. It appears, likewise, that the cupidity of persons not of the medical profession was stimulated, and the manner in which they carried on their traffic was alike indicative of their avarice and their ignorance. The followers of this trade obtained the shirt-sleeves of patients which had been stiffened by the purulent discharge from an ulcer consequent on vaccination. These they cut into strips, and sold about the country as impregnated with the true vaccine virus. Several hundred persons were actually inoculated with the poison, which, in several cases, produced great disturbance in the constitution. A vessel arrived from London at Marblehead with a sailor on board who was supposed to have cow-pox: matter was taken from him, and was used extensively. It was soon discovered that small-pox matter had been employed, and *that* disease spread

rapidly through the neighbourhood. These blunders, it is to be feared, were not confined to vagrant quacks, inasmuch as several medical men were not quite blameless."*

Whilst such doings discredited vaccination in one way, they served it in another: they made it easy to conceal its failures and injuries by ascribing them to the use of spurious virus. Everything is to be gained for truth in vaccination by taking it in what its believers allow to be its unexceptionable form, so as to leave no room for evasion. Small-pox in America as in England soon showed itself indifferent to the art of the vaccinator, and then it was settled that at least it made the disease milder; and under cover of the convenient fiction it continued to be practised where fees were to be had for the performance.

The attitude of the medical mind to epidemics, and the ignorance of what we now regard as the first elements of sanitary science, are illustrated with touching sincerity in a letter addressed by Dr. Waterhouse in 1817 to the Surgeons of the United States Army. Said the Jenner of the New World—

"You need not waste your time or distract your attention by guessing at the remote causes of dysenteries or epidemic fevers. We learn from the highest authority, that the pestilence 'walketh in darkness.' The enemy approaches unseen. We are pretty well convinced that epidemic fevers depend not on any of those changes in the air that are pointed out by the thermometer, barometer, or hygrometer. These wide spreading maladies, as well as endemics, or local disorders, seem as if they arose from some secret movements, or alterations in the earth, or on its surface—that is, on some new combinations in the soil, or some effluvium from a deeper situation, affecting not only the air we breathe, but the water which we use for everything. Epidemics seem to accompany or follow a blighted state of vegetation. They seem also to accompany an abundant harvest; but whether in the series of cause and effect is not fully known. As to myself, I'm weary of conjecture."

Well might he be weary! He does not say so, but neither does he make any reserve in favour of vaccination; and after seventeen years trial of it, the old physician must have included it in his cry of *Vanitas Vanitatum!*

An Instructive Experience.—A lady told me the other day that she had five children, four of whom she was persuaded to have re-vaccinated, holding back the fifth on account of delicate health. She attended to the vaccinated arms, which were much inflamed and troublesome, when she was seized with small-pox, which also attacked her child who was *not* re-vaccinated—a triumph for the doctor who had strongly recommended the re-vaccination of the whole family. I told her that I had little doubt that her small-pox was contracted from the effluvia of the four vaccinated arms. "Yes," she replied, "that is my own suspicion, but I never heard it expressed before." She added that she and her daughter got nicely over their attack; that it was not much worse than vaccination; and that their general health had much improved since their illness.—St. Kentigern.

* Baron's *Life of Jenner*, Vol. i. p. 387.

THE TWO CREEDS.

The vaccine profession seem content to leave their theory in its original shroud. It is felt to be unwise to particularise, and the proffered blessings are clouded in generalities. We need expect no reply when we ask, What are the items of the claim made on behalf of the cow-pox? What will it do for the individual who submits to the operation? Is the protection personal or collective? If personal, how can a protected person become a victim to the small-pox? If collective, is the protection shared equally or unequally among the recipients? If shared equally, a vaccinated person, believing himself to be 37 times safer than his opponents, may quietly await his turn, and see the anti-vaccinators laid low before his time arrives. If shared unequally, what is it that governs the inequality? Does the efficiently vaccinated landowner in his country mansion receive a fuller measure of protective virtue than the efficiently vaccinated proletaire who sleeps in a cellar, or over a malodorous mews? And is the proportion of individual or collective protection received in vaccination by our legislators themselves fairly estimated, if it be described as 37 times greater than that received by an equal number of vaccinated Red Indians, Icelanders, or Samoiedes?

State Medicine is reserved when inquiries are made. State Compulsion can only be justified by State Infallibility. Were State Medicine explicit, it would soon cease to be infallible: an explicit infallibility would become incapable of changing its front.

Judging from the impetuous tirades aimed against the anti-vaccine defenders of personal and parental rights, the modern vaccine creed may be thus particularised:—

1. Small-pox is the lot and destiny of all (with the reserve that there is no rule without an exception).
2. Subject to the same reserve, a single attack is the common law of nature.
3. Small-pox once had the power of originating; but in these days can only be propagated from an existing case.
4. Cleanliness and hygienic precautions, domestic or municipal, exert no practical influence over it: the palace is as liable as the wigwam: the anti-vaccinator is powerless against it: the only preventive, and the only mitigator, is vaccination.
5. Vaccination can mitigate, but cannot cure.
6. Vaccination from the cow is perfect: but the calf is better.
7. Vaccination properly administered from cow, calf, or human being, can convey no disease but cow-pox. Those who hold this opinion, ought to be the sole judges in cases of alleged transmission of family diseases.
8. The chances of recovery from small-pox among the vaccinated are dependent on the number, age, and quality of their Vaccination Marks, and are in no way influenced by the age or constitution of the patient, the nature of the treatment, or the "atmosphere of concentrated infection" which does not always infect re-vaccinated hospital nurses.

9. Vaccination ought to be judged by the statistics or figures adduced by its advocates.

10. Vaccinators are a mild and suffering race, who simply ask for legal power to vaccinate and re-vaccinate friend and foe *ad libitum* at the expense and risk of the individual or the public.

11. Anti-vaccinators are people who, when trodden upon, are apt to "let angry passions rise."

The anti-vaccine creed is less intolerant, and may be thus displayed:—

1. Small-pox is a filth disease, and may originate daily in the foul haunts where dirt and degradation reign.

2. The attack is mild or severe according to the amount or intensity of the impurities to which the sufferer is, or has been, exposed, and the strength of his constitutional powers of resistance.

3. Sanitation is better than vaccination.

4. Anti-vaccinators, by reason of their avoidance of transmitted disease, and their active belief in sanitary laws, are less liable than vaccinating families to the attacks of the zymotic or filth diseases throughout life, and are consequently regarded with "eye askance" by the extreme section of the medical profession.

5. Statistical comparisons ought to be made between vaccinators and anti-vaccinators, and not between the strong and the weakly of vaccinating families. H. D. D.

CALCUTTA.—There was no small-pox in Calcutta in 1880, but compulsory vaccination was brought into force for the first time under Dr. M'Leod. The law imposes upon the corporation of Calcutta the function of making arrangements for the due performance of the rite, and the results are looked forward to with much interest.

THE *Vereins-Blatt* for March, contains an account of the death of Abraham Paulus, a native of Greenland, occupied in the construction of a map of the Labrador coast. The account states that some time since Paulus, with his family, eight persons in all, arrived in Germany, where three of them died, the remaining five going to Paris to reside there. It does not appear whether they were vaccinated in Germany, but on arriving in Paris the authorities insisted on their undergoing the operation, which, proving abortive, they were re-vaccinated, and this time with such results that the whole five died in a few hours.—*Dulce est pro scientiâ mori.*

THE STRANGE HOPE OF "SCIENCE."—The Report of the Epidemic of 1847-48, published by the Board of Health, with its map of the plague-spots of London, marked to my mind, an epoch in Sanitary Science; demonstrating not only how completely cholera, but zymotic disease generally, could be eliminated by efficient sewerage, pure water-supply, adequate ventilation, and general purification of dwellings, combined with due precautions against the dispersion of the special poison."—Thus Dr. Carpenter writes in the *Modern Review*, and we agree with him; but he holds out the hope that for the various forms of zymotic disease there may be discovered antidotes of the same order as vaccination; and when these are discovered it will be possible to disregard Sanitary Science and live in filth with complete impunity.

PASTEUR'S EXPERIMENTS.

M. PASTEUR has continued and extended his experiments on the cultivation and attenuation of animal poisons, and has communicated his results to a general meeting of the Medical Congress. What was true of the virus of chicken-cholera, he finds to be also true of that of charbon or splenic fever, viz., that its virulence is due to a special *microbe* which is capable of attenuation and destruction by the agency of atmospheric oxygen, and further, that the inoculation of an animal with the attenuated virus preserves it in a quite miraculous manner from the danger of a future attack.

Notwithstanding aught that may be said to the contrary, these experiments of M. Pasteur furnish the most destructive arguments it would be possible for Pathology to produce against the theory on which vaccination is founded, and establish the strongest plea for a rational and sanitary system of treating disease.

The differences which exist between vaccinator and anti-vaccinator are deeper and more subtle than they at first sight appear to be; they are in fact, based upon two totally different views of disease. The vaccinator begins by assuming, what indeed is absolutely essential to his theory, that man is naturally unhealthy, or prone to disease, or blest with a "congenital liability," or "specific susceptibility" to each and all of the variable class of zymotic poisons. It is the particular *rôle* of vaccination (so says the theory) to remove the susceptibility to small-pox in particular. Small-pox, it is added, is due to a specific germ or microzyme, is propagated solely by contagion, and never arises *de novo;* and that since these germs are omnipresent and the liability to small-pox [apart from vaccination] universal, the sole cause which determines whether or no a person will or will not take small-pox is simply and solely that of vaccination. If he be vaccinated, he cannot take it; if he be unvaccinated, he must take it; small-pox is to be controlled and abolished by vaccination alone.

The anti-vaccinator on the other hand starts by affirming that man is naturally healthy, and not prone to disease; that health and not a chronic state of cow-pox is the antithesis to small-pox; and that so long as man is kept in healthy surroundings he will by the inherent resisting power exerted by healthy blood towards disease germs,* enjoy complete immunity from small-pox or any other of the class of disease to which it belongs. That small-pox and its allies are the Nemesis of hygienic shortcomings. That its causes are amenable to sanitary influences outside the body, and by such alone can it be satisfactorily and successfully combated; and that where these are neglected, there small-pox will arise and prevail. That small-pox must have arisen *de novo* at some time, and that it might do so as well now as then. These briefly are the two views which are held; they differ widely, and the struggle between them must be internecine.

For more than 80 years the vaccination experi-

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* *Vide* Prof. Lister's speech at Medical Congress.

ment has been tried, and for the last thirty it has been generalised by the aid of a compulsory law, but alas! with doubtful success, and the most enthusiastic disciple of Jenner must admit that vaccination has failed to realise what was expected of it, and that every one of his master's original propositions have been negatived by time and experience. The experiment of sanitation in great measure yet remains to be tried, owing to the fact that it is still a fashionable fiction to declare that "Sanitary measures have no influence on small-pox."*

Now it has long been recognised by physicians that for the occurrence of any particular disease of the zymotic class, two sets of conditions are necessary, known respectively as *predisposing* and *exciting*. The two must conjoin to produce the disease, and while the first set is common to all the members of the class, the second is distinctive for each, and gives to each disease its diagnostic features. The former class results from what may be termed unwholesome conditions of life, and is to be met and obviated by their removal; thus Dr. W. B. Carpenter writing on the Predisposing Causes of Epidemics, concludes thus—"It would be possible to extinguish the greater number of epidemic diseases by preserving the blood of every individual in a state of unfermentablity, which shall effectually prevent these poisons from finding the conditions of their development within the body."† It is a pity Dr. Carpenter's later publications have not been inspired with the same good sense. Sir Thomas Watson also writes in the same strain when he says, "In proportion as the body is weakened or exhausted, it yields more readily to the influence of contagion, or of malaria; but *by obviating all causes of debility and fortifying the system*, we walk with comparative immunity amid surrounding pestilence." ‡ As for the exciting causes of disease, these, according to the most fashionable theory of the day, are certain lowly organisms, germs or bacteria. Whether this theory be the true one, whether the *materies morbi* be animal, vegetable, or chemical, particulate or diffuse, matters little to our present purpose, and in no way interferes with the induction to be drawn from M. Pasteur's researches. The one grand and fundamental conclusion at which he has arrived, and which he holds to be part of a universal law is this—*that the exciting causes of disease can be weakened and destroyed outside the body by natural agency, viz.*, PURE AIR.

It follows then, logically, from what has been said, that all the factors which go to make up disease, may be controlled and destroyed by careful attention to those natural and rational precautions which may be briefly summed up in this one word "sanitation." Cleanliness, good food, uncontaminated water, and a plentiful supply of pure air, are henceforth our reliable prophylactics. Fortify the system, and purify the surroundings, and disease must vanish away. The half-truth on which vaccination is founded must before long give place to the whole truth of sanitation, whose aim is to abolish disease altogether, not to disseminate and perpetuate it, to invigorate health, and not to try to improve upon it by substituting "a permanent morbid condition of the blood."*

W. J. COLLINS, B.Sc., M.R.C.S.

St. Bartholomew's Hospital.

* Simon's *Evidence before Select Committee, 1871. Q. 2963.* Carpenter, *Times, May 23rd, 1881.*

† *British and Foreign Medico-Chirurgical Review*, January, 1853.

‡ *Practice of Physic*, Vol. i. pp. 77, 3rd Edition.

ANTISEPTIC VACCINATION.—The following letter appeared in the *Lancet* of 25th June—"Having seen several cases of erysipelatous and septicemic inflammation following vaccination, and having myself been disabled for three days by the same, I would suggest that, following the acknowledged success of the 'antiseptic system', considerable pain and inconvenience might be done away with by the use of the carbolic spray during vaccination and the hermetic covering of the wound afterwards. —E. F. GRUN, Dresser at the London Hospital."

MARKS—PRAY EXPLAIN.—The Deptford Hospital Report for 1879 gives account of 317 small-pox patients with one vaccination mark, 384 with two marks, and 447 with three marks. Homerton Reports for 1871 to 1877 give 1,042 persons suffering with small-pox showing one mark, 1,259 with two marks, and 1,261 with three marks or more. Fulham Report for 1878 gives 149 cases with one mark, 156 with two marks, 202 with three marks and more. The Metropolitan Report for 1870-2 gives 1,124 with one mark, 1,722 with two marks, 1,677 with three marks and more. How is this? The anomaly certainly needs explanation. In every case except the last, more persons suffered from small-pox who had two vaccine marks than those who had one. And, again, those having three vaccine marks and more suffered in larger numbers than those who have only two or one, as regards fatality. I ask for explanation.—ALEX. WHEELER in *Newcastle Chronicle.*

WHERE CHOLERA AND FEVERS WERE BRED.—My own recollection goes back to the time when Sanitation was in its infancy; when Fevers of various kinds were considered "visitations of God," which came in the ordinary course of things, and from whose occasional ravages no population, whether urban or rural, could look for exemption. It was the first visitation of Cholera, which took place in 1831-32 (when I was myself a medical pupil) that stirred up public attention to the relation between dirt and disease, foul air and pestilence. In every great town the localities most severely visited were, in nearly all cases, those which had been previously known to the medical attendants of the poor as "fever nests." Sanitary Committees were everywhere formed, which brought to the knowledge of the public a depth of squalor previously undreamt of. Accumulations of filth of every conceivable kind, fearful overcrowding, and almost complete exclusion of fresh air, were the conditions which characterised most of these localities; and where these were wanting, a further search could always discover a cesspool or obstructed sewer, that poisoned all the air breathed by the dwellers above it. The alarm died away, however, as the pestilence abated; and nothing of any permanent value was done.—DR. W. B. CARPENTER in *Modern Review.*

*Paget. *Lectures on Inflammation.*

"PURE VACCINE LYMPH"—WHAT IS IT?

By E. Haughton, M.D.

Before any rational decision as to the advantages or disadvantages of vaccination can possibly be arrived at, another question must be answered without dissimulation, evasion, or deceit—namely, "What is vaccination"? This question may be answered by the impudent assertion that "everybody knows that," or, by an endeavour to raise some side issue so as to leave the questioner without any satisfactory reply. We may be referred back to the days of Jenner, and regaled with the interesting story of his conversation with a milkmaid, and his notions about horse-grease, swine-pox, ass-pox, and the like. But the question now is this—If I am desirous of being vaccinated with the best vaccine lymph, what is the nature and source of the animal virus that will probably be provided for me? I may, of course, shut my eyes and open my mouth, as is sometimes said to children when sweetmeats are offered to them; but vaccine "lymph" is not a sweetmeat, neither is it a "natural secretion like milk and butter," as was once said by a quondam president of the British Medical Association. It is something which, Sir James Paget assures us, is very "beneficial," although it produces "a permanent morbid condition of the blood." According to my conception of the proper usage of words, what is called "vaccine lymph" is not lymph at all, but a fluid excreted from a sore produced by an animal virus, whose exact nature is the subject of much controversy amongst leading members of the medical profession, and which must continue to to be the subject of controversy so long as it is derived from sources altogether different from one another.

Dr. Jenner stated in his largest work that the infection employed by him came in the first instance from the horse, originating in a complaint called "the grease," which is attended by an oosing of thin matter from the heels of the animal; and this, according to Mr. Seaton's evidence before the Parliamentary Committee in 1871, constitutes the principal supply for the United Kingdom. As the results of using this "lymph" have been severely criticised on all sides, and public confidence in its efficacy begins to wane, it has been foreseen by the advocates of the Compulsory Vaccination Acts, that unless some substitute could be found out in which the public could still believe, the entire repeal of those Acts, with all their emoluments, would follow as a matter of course.

The charges made against the "old stock" were many and grave, and some of them came from persons who could not be conveniently "boycotted," or even denied an impartial hearing. What was to be done? A new idea entered into the brains of several medical men, and I hope I may not wrong any of these illustrious gentlemen by putting their names further down on the list than they ought to be from a chronological point of view. The names are: The late Mr. Ceely, of Aylesbury; Dr. Blanc (the Abyssinian Captive); Sir John Cordy Burrows; and Mr. Badcock, of Brighton; and Mr. Greene, of Birmingham. Last, not least, comes Mr. Ernest Hart, the apostle of truth and of the Belgian calf-pox. Mr. Hart is the author of a brochure called, "The Truth about Vaccination," and is well known as an advocate in the pages of the *British Medical Journal* and elsewhere for the manufacture of "Pure vaccine lymph" by inoculating heifers or calves with variolous matter, or, in other words, the pus which exudes under the skin in the form of pustules, constituting the disease popularly known as the small-pox. This is, in fact, the practical adoption of a kind of homœopathic theory; and, curiously enough, is most popular amongst those whose anger is most easily kindled against anything supposed to savour of homœopathic practice.

But, nevertheless, there are some points of distinction which it would be well to bear in mind. First, it is not a drug that is used, which exhausts itself in its primary effects; but a living substance, capable of self-multiplication within the living body. Secondly, it is not used to cure, but to prevent disease—though even the former notion has been tried by some of its most prominent advocates, I need not say with terribly fatal effect. Thirdly, it is a substance that cannot be analysed, nor its exact composition ascertained. It even has been stated by microscopic authorities that it generally contains some of the red corpuscles of the blood, and always some of the white ones. From which it may be inferred that whatever can be transplanted with the blood of other human beings may also be transplanted in the process called vaccination. When it was found no longer possible to deny the fact of such "ghastly contaminations," refuge was taken in the statement that such accidents were of such extreme rarity that they ought not to be taken into account when a "beneficial" protection was in question. Now, however, there is no need to reiterate the fact that there are other poxes than cow-pox, and that some of them are transmissible to the third and fourth generation. In the face of such awful disclosures, another move was imperative; and, *presto*, a new lot of vaccine lymph has been found, which will do all that is required of it; whilst (like Cæsar's wife) it is itself above suspicion. I have heard of a gentleman who once bought a race-horse, but was so unfortunate as to lose his pedigree almost directly after the purchase. As he had paid a large sum for the animal on account of the pedigree, he applied again to the dealer; who at once replied that he was sorry he had not a copy of it, but he would engage to shortly *furnish him with another which was quite as good!* In like manner, should the pedigree of the original calf that was so obliging as to furnish the Belgian Pox (now so fashionable) be lost, through the carelessness of an ungrateful world, there can be no doubt that another will immediately be forthcoming, which (so far as results can show) will certainly prove to be *quite as good.*

"My wish is," said an irate Indian official to Mr. Young, "that every one of you agitating anti-vaccinators should be hanged. Who can measure the mischief you are doing!"

WHAT SAVED THE UNVACCINATED?

A LEADING article in the *Times* of 15th December, 1880, contained the following — "It would appear, therefore, as if the advocacy of vaccination might with advantage be placed on a different ground from that which has commonly been urged by its supporters, and as if the operation might be recommended or enforced, not as a means of *preventing* small-pox, but as a means of preventing mortality from it, when it occurs." The following facts will demonstrate to the impartial reader the falseness of the assertion that vaccination prevents mortality from small-pox. In the *Lancet* and *British Medical Journal* have appeared, during the last nine months, reports of cases of malignant small-pox occurring in the Homerton and Fulham hospitals. Four cases are given, of which three had been vaccinated, and one was unvaccinated. The vaccinated cases all died, the unvaccinated case recovered. The following comment upon the latter cure, by Dr. Gayton, the medical superintendent of the Homerton hospital (*B. M. J.* April 9th, 1881), will be read with interest— "This case is interesting from the fact that, after a somewhat lengthened experience in the treatment of small-pox, and observations extending to upwards of *eight thousand cases, a similar one terminating in health* has not come under my notice. The very severe symptoms as shown by the initial petechial exanthem; the cutaneous extravasation of no small extent; the sparseness of the small-pox eruption, and its ill-developed and blood-like contents, pointed with an almost terrible certainty to death."

If vaccination neither mitigates the severity of the disease, nor saves the vaccinated from death, where are we to look for its protective influence? And what was it that saved the unvaccinated?

ENOCH ROBINSON.

DUKINFIELD, 15*th August*, 1881.

THE VACCINATORS' IDEAL.—Dr. Collingridge, medical officer of health for the port of London, says in his last report, that until the Vaccination Act is carried out in its entirety, and until re-vaccination becomes general, with *thoroughly efficient annual vaccination*, there seems little chance of avoiding serious outbreaks of small-pox.—Thoroughly efficient annual vaccination! It is what we have been expecting, and wondering who would first hoist the flag. Now it is done, and Collingridge is the man. Bravo, Collingridge!

SPAIN.—A correspondent in Madrid writes— "Vaccination has been long practised in Spain. It is not compulsory, even for entrance to schools; and in the army, only those recruits are vaccinated who have not previously undergone the operation. There are occasionally outbreaks of small-pox among the soldiers; and from time to time the disease assumes a very deadly form in Spain, in spite of general vaccination. The repetition of vaccination is not common."—In the *Almanaque de Medicina y Farmacia* for 1882 will appear an article by Dr. Hubert Boëns on the International League of Anti-Vaccinators, its Organisation and its Purpose.

THE NEMESIS OF VACCINATION.

WHAT you sow you reap. Plant septic pollution in the blood of your children and you must expect a growth of pollution. Resort to a common sewer which contains the seeds of every hereditary disease, and under a superstitious notion inoculate your infants with its filth, and you must expect the healthiest children to be reduced to the foulness of the most wretched. We address these words to the people of Scotland. They will be put in type and printed there, and we hope read and pondered.

For now the representatives of Wallace and Bruce are the tamest serfs on earth. They submit to the despotism of irresponsible doctors and allow them to poison their children's blood, without even a protest. As far as we know, there is not a single energetic Anti-Vaccination Society, working for freedom of conscience and the natural authority of a father as king in his family, in all Scotland. The result of a common pollution is now becoming manifest.

In the *Family Doctor*, published by W. H. Allen and Co., London, 1st August, 1881, it is stated on page 2, "That not a single family in Scotland is free from skin disease."

One dead level of pollution is the heritage of the people of Scotland. The filth of vaccination will in due course universalise the pollution of syphilis, and physical rottenness will be the prelude of national degradation and extinction. Is there no hope for Scotland in the manliness of her sons? Have they not the sense to discern and reject the abominable imposture? We shall see.

WM. GIBSON WARD.

Perriston Towers, Ross, Herefordshire,
18th August, 1881.

OUR EVIL EXAMPLE.—In the Cape Town newspapers we observe that the Town Council are holding up the possibility of the importation of small-pox from London as a terror to drive the colonists to vaccinate and re-vaccinate; adding that "vaccination and re-vaccination are thoroughly trusted to in Europe as preventives of small-pox."

ANTI-VACCINATION IN THE PULPIT.—A Constant Subscriber writes—"It may interest you to know, and may stimulate others who profess to be preachers of truth, that in a sermon at the Catholic Apostolic Church a few weeks ago, reference was made to vaccination. The preacher denounced it as an essentially anti-christian practice; for whereas Christ came to cleanse from sin and remove its results, vaccination reversed that operation. Reference was also made to the commission to the disciples to *cure* all diseases, but nowhere, said the minister, are we taught that this was to be effected by infusing into the blood diseased matter from brutes. Wo! unto any country which permits its government not only to enact, but to enforce by fine and imprisonment, the pollution of its pure and innocent infancy. I have since learnt that the sermon has been in great request, and that one lady who had advised her servant to be vaccinated 'felt very uncomfortable,' and informed the minister of several cases of 'accident' from the practice which had come under her own notice."

"A DISGRACE TO HUMANITY!"

MR. YOUNG having sent a card relative to the increase of small-pox in London coincidently with the increase of vaccination to Mr. Benjamin Barrow, F.R.C.S., J.P., and Mayor of Ryde, received in reply the following—

"Your card on vaccination tells nothing. Your reasoning is fallacious.

"I consider your Society as a disgrace to humanity!—Yours faithfully, B. BARROW.

"Ryde, I. of W., July 29th, 1881."

A disgrace to humanity! The true servants of humanity have been often thus stigmatised, and the deeper their service, the sharper the stigma; but in the stigma they found stimulus, and from the stimulus issue, victory.

JENNER AND JESTY.

THE following letter appeared in the *British Medical Journal* of 9th July—

"Whilst on a visit in the county of Dorset, I was surprised to find on a gravestone in the churchyard of Piddletown the following memorial: 'In memory of George Jesty, who departed this life June 23rd, 1845, aged 63 years, youngest son of the late Mr. Benjamin Jesty, of Downshay, Isle of Purbeck, discoverer of the memorable vaccine inoculation.' Afterwards, I found in the churchyard of Worth Matravers, a memorial stone with the following inscription: 'Sacred to the memory of Benjamin Jesty, of Downshay, who departed this life April 16th, 1816, aged 70 years. He was born at Yetminster, in this county, and was an upright honest man, particularly noted for having been the first person known that introduced the cow-pox by inoculation, and who, from his great strength of mind, made the experiment from the cow on his wife and two sons in the year 1774.'

"If this date can be relied upon, Jesty's experiment preceded Jenner's on the boy Phipps by twenty-two years. I was informed that Mr. B. Jesty was a large dairy-farmer.—Yours faithfully,

"F. WHITWELL.

"Shrewsbury, June 20th, 1881."

These particulars are frequently revived, and the true answer is that what Jesty claimed Jenner did not claim. Jesty inoculated with cow-pox, sharing the dairy-maids' faith that it prevented small-pox. Jenner knew that the dairy-maids were wrong, and that cow-pox did not avert small-pox. What he recommended was cow-pox produced by horse-grease. Pearson and others disregarded Jenner's recommendation and made use of cow-pox like Jesty; and Jenner did not resist; and not only did not resist, but allowed it to be supposed that they were fulfilling his programme. Facts, however are facts, and we should not let Jenner get mixed up with Jesty, and the course of Jenner's procedure be obscured.

A CARD FROM HASTINGS.—Mr. Wheeler has received a post-card bearing the following anonymous communication—"It has been *proposed*, and I hope to see the same CARRIED OUT, That medical men do *not* attend *unvaccinated* cases of small-pox—let the fools attend upon themselves—M. D."—We have no objection. Our friends will not consider the prospect alarming.

A LETTER FROM FRANCE—A MOTHER'S EXPERIENCE.

THE packet of anti-vaccination tracts I have read with the deepest interest, and I would now suggest that, with your attacks upon Jenner and his so-called discovery, which could not have been scientifically tested when taken up, the London Society should obtain disinterested medical instruction for the treatment of small-pox and publish it. The best mode of combating the disease should be made known. Ignorance on this subject throws many into the hands of Jennerian practitioners who, if they knew how to meet small-pox, would stand out against vaccination.

There is one fact which I am ready to concede to the Jennerians. It is, that pock-pitted faces are not nearly so frequent now as they were in my childhood. Perhaps it is because at that time the generation which had been inoculated with small-pox *à la* Mary Wortley Montagu, had not died out. The Jennerians altogether leave out of sight in accounting for the diminution of small-pox within this century the disease of variolic inoculation, which in the last had spread from the Levant to London.

My husband has told you under what circumstances he became an Anti-Jennerian. I had long before had doubts, but they were overruled by my family in 1866, when we lived in a neighbourhood where there was much small-pox, and I had an unvaccinated infant son. I do not remember when I was first vaccinated, but there was a tradition in the servants' hall that all the diseases of infancy crowded at once upon me, and left me a "death-upon-wires." At the age of eight I was, with several other brothers and sisters, re-vaccinated. In less than eighteen months after, the health of my eldest sister, a strong grown-up girl in the most robust condition when re-vaccinated, broke down. A goitrous swelling in the neck declared itself. My eldest brother caught the small-pox, but was not marked, and I was laid low with typhoid fever. I did not grow three inches from the age of nine to seventeen, when strength came back, and I shot up to a fair enough stature. The other children did not appear to suffer from any evil consequences; but I distinctly remember that a boy who was born after the general re-vaccination of the family, and who was a remarkably fine and healthy infant, was given in vaccination some horrible disease which fixed itself in the glands of the neck. He came of a splendidly healthy stock; but one would have said that he was the child of scrofulous parents. The family doctor, who had vaccinated him, suggested that a nursery-maid had been careless about the poor infant in her walks, and given him to dirty people to hold, which was an unfounded assumption. The child has grown up to be a sickly man. His glands are now all right; but the swelling only left them to settle in one of the knees.

The English believe in the Bible. You ought to call Moses into court. He had enlightened ideas on the subject of hygenics and sanitation, and would have never suffered morbid germs to be put into the blood. You could prove from Moses the whole skin principle, which in a country like England would be doing a great deal.

Before I conclude I shall mention a case of death from confluent small-pox of a girl who had lived in my service, and had been in a convent in which she was reared, vaccinated over and over again. There were long lines of vaccine marks on the upper part of her arm. Small-pox carried her away notwithstanding after three days' illness. E. C.

AN OUTRAGEOUS CASE.

Mr. Joseph Wood, furniture broker, of 207 Dalton Road, Barrow-in-Furness writes to Mr. Tebb, 18th August—

"I was fined on 11th July in the sum of 20s. and costs for disobeying an order to vaccinate two of my children, total £3 4s. On Monday I was distrained upon for that amount and further costs, total £3 19s., and four police took £20 worth of goods from my place. My reason for not paying the fine was that in my opinion, and in that of my solicitor, it was illegally inflicted by reason of the presence on the Bench of the chairman of the Board of Guardians at whose instance I was prosecuted."

Mr. Wood is unquestionably right in his contention that he has been illegally fined. The presence of the chairman of the Board of Guardians on the Bench as his prosecutor and judge was so grossly indecent, that if his head were not turned by the vaccination craze he would recognise its impropriety. No doubt the Home Secretary will interfere and see that justice is done.

Shettleston, an eastern suburb of Glasgow, is described in the *Daily Mail* as being in an alarming condition—dungsteads overflowing, roads flooded, etc., etc.; and to mend matters the authorities recently sent round a doctor to vaccinate the inhabitants!

Mr. George A. Sala.—Mr. Sala is the gossip of the *Illustrated London News*, and is always amusing, and not the least so when he is frivolous. In the number for 23rd July, he says—"I have received a bolster of printed and written documents referring to a London Society for the Abolition of Compulsory Vaccination. I have forwarded them to a friend of mine who is Honorary Secretary to the Societies for Abolishing the Compulsory Registration of Births, Deaths, and Marriages; for the Re-enactment of the Corn Laws, the Re-establishment of the Practice of Burning Witches Alive, the Restoration of Temple Bar, the Re-opening of the Fleet Ditch, and the Promotion of Infectious Diseases."—It would be vain to reproach Mr. Sala with knowing a little of everything, and not much of anything; for that, he would reply, was his profession; but it accounts for his fun over the enforced quackery of vaccination, as hateful in its way as the superstition of witchcraft, with which, indeed, the analogy is remarkable.

Rarity of Seers.—Very, very few are the men who can, by and for themselves, see and describe the things that are before them. Just as it took thousands of years to produce a man who could see, what now any one can see when shown him, that the star Alpha in Capricorn is really two separate stars, so we had to wait long before the men came who could see the difference between measles and scarlatina, and still longer for the one who could distinguish between typhus and typhoid. Said Plato, "He shall be as a god to me, who can rightly divide and define." Men who have this faculty—the "Blick" of the Germans, we cannot produce directly by any system of education; they come, we know not when or why, forming a small band, a mere understanding of whose thoughts and works is a test of our highest powers. A single English dramatist, and a single English mathematician have probably equalled in scope and excellence of original work in their several fields, all the like labours of their countrymen put together.—John S. Billings, M. D. at *International Medical Congress.*

MUCH VACCINATED.

[In German-English from the *Detroit Free Press.*]

Bright and early yesterday morning a middle-aged man of anxious look and much corporosity, called at the city hall, and went for the chief of police with—

"Haf we some shmall-pox in Dedroit?"

"I believe we have a sporadic case or two," was the reply.

"Und doze somepody haf to get waccinated to keep him avay?"

"Every citizen should protect himself."

"How many dimes was I got waccinated to keep dot shmall-pox out of mein house and saloon?"

"Oh, I guess once will do."

"Vonce! Great Shiminy! no more ash dot? Shust wait a minut!"

He jerked off his coat and pushed up his shirt sleeves and pointed to four spots on his left arm, and five on his right, and said—

"Four and five makes nine times dot I vhas waccinated in four days."

"How is that?"

"How ish dot? Dot's vot I likes myself to know. I vhas shust reading about dat shmall-pox de odder day in der Sherman papers vhen a women walks in mine saloon und says: Sharley, dot shmall-pox is all oafer town, and you must be waccinated or der gommon gouncil will close you oop! So I vhas waccinated for two shillings and zwei class peer."

"Yes."

"It vhas shust two hours more as a man comes in und says he vhas sent to waccinate on der odder arm, und I pays him two shillings und class of peer."

"Yes."

"Pefore night a man mit spectacles comes in und says he vhas sent by der health poard to see oof I vhas waccinated. I show him two blaces, but he shakes his headt und says, 'Dot waccination am too high oop, und you vhil git der shmall-pox in der hands." Den he makes dot blace here, und I gif him twenty-five cents und class of peer."

"Yes."

"Vhell, in der course of four days six more men comes aroundt to waccinate me by order of der mayor, der gufernor, der president, der poard of bublic vorks, und I don't know vhat else, und efery time I bays two shillings und class peer. Vhen I vhas waccinated nine times I pegins to believe I vhas a greenhorn, und vhen der tenth man comes aroundt I hit him on der headt mit a bottle and vhalks oafer to see you aboudt it. Vhas it all right?"

"I guess the boys were guying you."

"What ish dot?"

"Why, you haven't really been vaccinated at all."

"No!"

"No; and you'd better be vaccinated again."

"Waccinated again! Waccinated den dimes? Nefer. Pefore I vhas waccinated den dimes I catches der shmall-pox, und goes to ped mit him all summer!"

Mr. Henry Bergh, President of the American Society for the Prevention of Cruelty to Animals, writes to Mr. Tebb from New York, 30th July—"I have never held but one opinion of that filthy, unnatural and criminal mode of treating disease in human beings by inoculating a healthy body with the matter derived from a diseased body of one of the lower animals."

GONE TO THE DOGS.

OUR readers will be amused with the following advertisement, now posted over south London—

CANINE VACCINATION.

DOGS VACCINATED with Calf Lymph as a palliative of Canine Distempers (Typhoid Fevers, &c.), which are now prevalent. Hermetically sealed Calf Lymph from the Establishment of Dr. Renner kept in stock for that purpose.

ROYAL SOUTH METROPOLITAN DOG & CAT HOSPITAL, BRIXTON,

Founder and Proprietor—A. E. CONSTANT.

Veterinary and Canine Surgeon, late Government Inspector of Cattle, M.R.C.V.S.L.; Author of "A Treatise on the Cattle Plague," "Rabies in the Dog," &c.

Vaccinators Supplied with Calf Lymph.

It is an acknowledged fact by Medical Men that the diseases of the lower animals tend greatly to engender diseases (Fevers, &c.), among the human race, where they are allowed to be together.

MISS ROBINSON wishing to learn Mr. Constant's terms for the salvation of dogs from distemper, wrote to inquire, and the following was his answer—

"South Metropolitan Dog and Cat Hospital,
20th August, 1881.

"Madam,—Your favour to hand. The age I consider most suitable for canine vaccination is from 4 to 6 months. From extent of my practice of over 20 years, I believe it to greatly mitigate, if not entirely prevent, what is termed distemper. The fee at hospital is 7s 6d. I am, Madam, yours truly, A. E. CONSTANT, M.R.C.V.S.L."

Alas! it seems to be with dogs as with men, it only mitigates when it does not prevent. Cobbett tells us what that means.

SMALL-POX FROM A WIND INSTRUMENT.—There has been an outbreak of small-pox at Wokingham, and the *Lancet*, 23rd July, accounts for it by a musician with the disease upon him "blowing strenuously through a wind instrument, and thus presumably diffusing infection among hundreds of people" at a parish fête. "At Swallowfield twenty cases have arisen, all traceable to the musician." Think what havoc such a musician might play at Covent Garden or Drury Lane!

MEDICAL QUACKERY.—The profession of medicine always has offered, probably always will offer, peculiar attractions to those who with weak principles, and still weaker consciences, desire to make profit by trading on the credulity of their patients. The thing is so exceedingly easy to do. Our real knowledge of disease in many of its departments is very vague, and our knowledge of therapeutics still less certain. There is room on all sides for differences of opinion, and scope for the introduction of new theories and the employment of high sounding epithets. The fatal facilities thus afforded to the charlatan have naturally made the well principled professors of physic, very vigilant in guarding their ranks against the introduction of quackery. We wish to be honest, and we wish to associate with none but those who are so.—MR. JONATHAN HUTCHINSON, F.R.C.S. at the Ryde Meeting of the British Medical Association, August, 1881.

WHY AWKWARD?—*The Medical Press* heads a paragraph describing a case of small-pox in an unvaccinated pupil at Clifton College as "Awkward for Anti-Vaccinators." Why awkward? Whoever maintained, that to be unvaccinated was to be secure from small-pox? It is vaccinators who promise security from small-pox to those who submit to their rite, whilst Nature is continually placing *them* in the awkward position of convicted impostors.

DR. WM. STRANGE of Worcester, describes a card on which is set forth the increase of small-pox in London, contemporaneously with increase of vaccination, as "an insult to the intellect of a boy of seven years old." Why? If what is said to prevent small-pox, not only does not prevent it, but suffers it to increase, the insult to the intellect is administered by those who cry for more and more of what is thus manifestly impotent.

MR. GEORGE SMITH of Coalville writes to the *Daily News* that for the second time within four months, small-pox has been conveyed from London to Braunston in canal-boats; adding that "in the first case there were man, woman, and six children sleeping in the cabin; and in the second there were living in the cabin at the time the boat 'pulled up' two men, two women, and two children of three different families."—We would ask Mr. Smith whether it is not conceivable that these boat-folk conveyed the small-pox to London? Has Mr. Smith never heard of varioplasm, *an unknown substance* that lies under the human skin, and breaks out into small-pox, whenever overcrowding and foul air provides the requisite stimulus?

DRYSDALE'S CONVERSION BY CEELY.—An enthusiastic calf-lympher was Dr. Drysdale, but in the *Medical Press* of 27th July, he reports his conversion to a small-pox lympher; and in this wise—

"It happened that I had a very long conversation with the late Mr. Ceely of Aylesbury at Cambridge, and he most kindly went into the subject of the production by himself of true vaccine vesicles on the cow by the inoculation of the matter of small-pox on the udders. Again and again did he assure me that he had on several occasions *succeeded* in this experiment, and that he had afterwards vaccinated many children with the lymph from these vesicles. A sceptic before, I was convinced; and unless M. Warlomont has something more to tell us than we have heard from MM. Chaveau, Viennois, and Meynet, I can only say that the *positive* experiments of Ceely *must* be taken to have proved the point that vaccinia is merely human small-pox modified in some way by transmission through the cow."

SCANDAL FROM CARDIFF.—Mr. T. Garrett Horder, public vaccinator, writes to the *Lancet* of 20th August that he has inspected the Cardiff schools, and has found no less than a hundred children without any marks of vaccination, and that at least 25 per cent. of the vaccinated were unprotected, either because the marks were too few in number, or because they were imperfect in character. What a scandalous assertion! At least 25 per cent. of the vaccination in Cardiff a sham, and little better than no vaccination! How does the *Lancet* suffer a correspondent to make such unprofessional imputations? The work, however bad, was paid for in good money, and the doctors had the money. Mr. Horder concludes by advising that no children be admitted to school without proper vaccination marks, and agrees with the *Lancet* in thinking that small-pox will never be stamped out until a Compulsory Re-vaccination Act is passed.

THE INTERNATIONAL ANTI-VACCINATION CONGRESS.

At the close of the proceedings of the First International Anti-Vaccination Congress held in Paris on the 11th, 12th, and 13th December last, a resolution was passed agreeing to continue these international gatherings until Compulsory Legislation should have been abolished in the leading Continental States. In order to carry on the work an International Committee was appointed, comprising well-known friends of the movement in France, Germany, Austria, Holland, Belgium, Switzerland, Russia, Sweden, England, Canada, and the United States; to which were subsequently added members for Northern and Southern Italy, Bavaria, Spain, and Australia. In consequence of the interest excited in the question in France, pending the discussion on M. Liouville's Bill in the French Academy of Medicine, the Committee was urged to hold the second Congress in Paris; but after fully considering all the circumstances of the case, they deferred to the persuasion of their indefatigable co-worker and leader in the cause, Dr. H. Oidtmann, and the stronger claims of Germany; and it was resolved to hold the next Congress at Cologne during the second week in October. A meeting of several active members of the Committee was held at Cologne on the 22nd of June, when a programme of the subjects to be considered was discussed and determined. The purpose of the Congress will be, 1st, to obtain and classify all trustworthy facts and statistics, both municipal and national, where vaccination is enforced by law; 2nd, to read and discuss papers on the subject; 3rd, to obtain the repeal of coercive legislation by all legitimate means. At the Paris convention the number of papers presented dealing with the various phases of the vaccination question were so numerous that it was found necessary to withhold a portion, and to abbreviate others; and in order to obviate a repetition of this necessity, it has been arranged to divide the Congress into sections, each dealing with a separate branch of the subject. At the Paris meeting eighteen delegates, representing eight nationalities, were present; but a much larger gathering is expected in October at Cologne. Among the opponents of compulsory vaccination who have signified their intention of taking part in the proceedings are Count Zedtwitz of Vienna; Dr. Hubert Böens of Charleroi; Professor Adolf Vogt, M.D., Berne University; Dr. H. Oidtmann of Linnich; Herr Zoppritz of Stutgartt; Dr. Scheurmann of Basle; Herr Carl Lohnert of Chemnitz, Saxony; Signor Damiani of Naples, and several well-known English delegates. The circular of invitation to the Congress contains the names of upwards of eighty of the most distinguished friends of the cause, including professors in various continental universities, and members of the German, English, and Swiss parliaments.

Those who intend to furnish statistics and papers, or to take personal part in the proceedings, are requested to communicate with Dr. Oidtmann, or Mr. William Tebb, 7 Albert Road, Regent's Park, London. We cannot well overestimate the importance of the Congress as a means of collecting and disseminating information and stimulating our associates everywhere to renewed efforts in furtherance of this righteous movement.

At a meeting of the Executive Committee of the London Society on 3rd August, it was resolved that the Chairman write to Dr. Oidtmann to the following effect—

The Committee of the London Society having heard from Mr. Tebb that arrangements have been made for holding a second International Anti-Vaccination Congress at Cologne in October, record their cordial satisfaction, and will do their utmost to further a project of so much importance.

Mr. P. A. Taylor has given notice of the following motion in the House of Commons—"Early next session to call attention to the undoubted failure of vaccination to prevent epidemics of small-pox, and to move that in the opinion of this House it is unjust and impolitic to enforce vaccination under penalties upon those who regard it as unadvisable or dangerous."

Mr. P. A. Taylor, M.P. has in the press a reply to Dr. W. B. Carpenter on the Vaccination Question. It will be published immediately. Price 1d.

The Anti-Vaccinator.—Mr. Pickering of Leeds has made the London Society a present of his stock of bound copies of *The Anti-Vaccinator and Public Health Journal.* It is a handsome volume, and full of facts and arguments set forth with remarkable vigour and perspicuity. The London Society will be glad to hear of libraries where *The Anti-Vaccinator* would be accepted and allowed to pass into circulation. Copies may be had privately for 1s 6d. Address Mr. Wm. Young, 114 Victoria-street Westminster.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 31.] OCTOBER, 1881. [Price 1d.

NOTES OF THE MONTH.

The case of William Escott does not excite comfortable reflections. A story has been concocted and imposed on the public credulity, which under scrutiny has vanished like smoke. It would appear as if to disbelieve in vaccination, and to have small-pox along with that disbelief, places a man outside the law of mercy, and as if the rule of truth itself were suspended for the greater glory of vaccination. At the same time, it is not for us to be depressed as in presence of some unheard-of phenomenon. The circumstances, however disgraceful and deplorable, are in nowise unusual. Escott's case is merely a reproduction under our eyes of innumerable similar passages in ecclesiastical, political, and social history. Human nature is a constant quantity, and its aberrations obey a fixed law. When, as in the instance of small-pox and vaccination, craft and terror combine, men invariably exhibit themselves as unscrupulous, cruel, and mendacious. Taking Dr. Johnston as the representative of craft and Parson Beck as that of terror, we have in the fiction of the one and the howls of the other, with the newspapers for chorus, a game which has been played since human nature had its being. Some of our friends are indignant over the facility with which the Press has lent itself to the wild hue and cry, but the Press is no more than a reproduction of the uninstructed public mind. Escott's case, as described by Johnston, suited the literary milliners who provide sensation for the public, and they set it forth, with various dexterous touches and twitches, without any concern for accuracy. When vaccination comes to be discredited, they will, with equal art and equal indifference, trick out the last news to its disadvantage.

Mr. Bottomley Firth, M.P. for Chelsea, says, "My own impression is that vaccination is often productive of good, and that it saved my own life." The value of the first half of Mr. Firth's impression may be estimated by the second—that vaccination saved his life. How does he know? If small-pox were invariably fatal, and the vaccinated escaped alive, it would be fair to argue that vaccination saved life; but small-pox, on the average, is only fatal to about one in five or six of those attacked, and is a disease of a wide range of intensity, so slight as to be without danger, and so severe as to render death inevitable; and this varied character of small-pox was known and recognised ere vaccination was heard of. When vaccination was introduced it was with the unqualified promise that it made small-pox impossible. Experience falsified the promise, and then the vaccinating quacks said, "Yes; but when it does not prevent, it makes the disease milder." Where was the standard of severity against which "the mildness" might be measured? The vaccinated and re-vaccinated die of confluent and virulent small-pox, and in what respect is the disease made milder for them? Mr. Firth was vaccinated, and had small-pox; but, according to the original Jennerian revelation, he ought never to have had small-pox at all. "But, if I had not been vaccinated," he says, "I should have died." How does he know? No one surely pretends that mild small-pox and recoveries from severe small-pox came in with vaccination. Mr. Firth is spoken of as a Quaker of sceptical tendencies. He might do worse than apply the said tendencies to vaccination, for he could scarcely exhibit himself in a more credulous attitude than in meekly reciting the vaccinating quack's catechism, "I believe that vaccination does good; and, though it did not preserve me from small-pox, it saved my life, for it made the disease milder."

What has been frequently predicted has at last come to pass; namely, an epidemic of small-pox in which all the sufferers have been vaccinated. There have been, there is little doubt, many such epidemics, but some uncertainty as to the fact of complete vaccination has been affected or asserted. In a recent outbreak at Bromley, where 43 patients entered the hospital, *all* were vaccinated, and three were re-vaccinated; two-thirds being young people between the ages of ten and

twenty. Mr. Marson, of the Highgate Hospital, reported that 870 out of 950 of his patients were vaccinated in 1871; and he freely allowed that he looked forward to the time when *all* would enter as vaccinated—the law of compulsory primary vaccination being universally obeyed. How the primitive vaccinators would have started back in dismay could they have foreseen such an issue from their vaunted practice, warranted to confer perpetual immunity upon those who once received into their veins the benign virus! That early faith is now surrendered. It is said boldly that we can no longer hope to be secure from small-pox unless we are vaccinated periodically; and that until re-vaccination is systematically enforced throughout the land, it is idle to look for the extirpation of small-pox. As there is no probability that Parliament will pass a Compulsory Re-vaccination Act, and as primary vaccination is confessedly ineffective, would it not be good policy to cease from the attempt to enforce the vaccination of infants, with all the attendant irritation and expense, and leave those who please to fortify themselves at discretion? Those who think they can be so fortified cannot complain that their safety is endangered by those who do not share their faith.

We would draw the especial attention of our readers to Mr. P. A. Taylor's reply to Dr. W. B. Carpenter, of which a very large edition has been printed and put into circulation, and would ask them to extend that circulation by every means in their power. Our opinion of Dr. Carpenter as a controversialist is a very low one: he is inexact, he is credulous, and he is absurdly conceited; but, having identified himself with the circle of fallacies that are vulgarly accepted as proofs of the advantages of vaccination, it is convenient to deal with him as their representative. We make bold to say that no one will rise from the perusal of Mr. Taylor's pamphlet without having his faith shaken in vaccination, and without a sense of humiliation that it has been possible to impose a practice on the public with so much audacious impudence, and so little warrant from verified experience. It is not unusual to hear vaccination described as "a triumph of modern science;" but our complaint is that science, in the sense of trained and accurate observation, has never been applied to it; and that the practice, such as it is, has been formulated by men like Jenner, whose intelligence was of "the professional average," or on a level with that of respectable monthly nurses.

Dr. Carpenter is incorrigible. We have just seen a letter in which he observes: "The continued prevalence of small-pox in London is *most clearly due* to the persistence of a large unvaccinated residuum." Most clearly due, is it? How, then, does he account for the outbreak of small-pox at Bromley, within the metropolitan district, ascribed to a bale of rags from Italy? None unvaccinated were attacked, but instead the vaccinated and the revaccinated. He further draws attention to the fact that, whilst London has been suffering from an epidemic of small-pox, and at the same time enjoying singularly good health with a low death-rate, nineteen English towns, whose aggregate population about equals that of London, have been almost exempt from the disease. To what purpose is the observation? Is it only in London that an unvaccinated residuum is to be found? Is Dr. Carpenter ignorant of the fact that he merely draws attention to a well-known and persistent phenomenon? The early vaccinators assumed that London small-pox was the measure of English small-pox, and even of the world's, and drew therefrom a variety of startling conclusions, alike as to the magnitude of the disorder and the miracles they proposed to work with their infallible specific. But their reckoning was wildly illusory. London small-pox was neither the measure of English small-pox, nor of that of the world. Many a year when small-pox was bad in London during last century, there was, precisely as at the present day, little or no small-pox in the towns and counties of England.

Wroth is the *Lancet* over Mr. Taylor's exposure of the fable of the hospital nurses protected from small-pox by re-vaccination; but abuse, though it may serve for a time, will not permanently avail in this question. The editor of the *Lancet* knows very well that the *general* immunity of nurses from small-pox did not set in with the practice of re-vaccination, but was recognised and wondered over before vaccination was heard of. So far as immunity exists, the true explanation is that the nurses are middle-aged women, past the time of life in which small-pox finds the majority of its victims. If we had the list of the nurses in any small-pox hospital, with their ages specified, the force of this explanation would be manifest. Again, there is something to be attributed to what may be called acclimatisation. If a woman engaged as a nurse endures the hospital atmosphere for a week unaffected, she may be taken as proof against small-pox for any term, the confidence and courage acquired from immunity constituting an additional safeguard. If, on the contrary, she succumbs, she is not reckoned among nurses, but takes rank as a patient, and in the event of

convalescence she may, if suitable, resume office, but as a fresh hand. We thus see how the possibility of nurses having small-pox is hedged round and limited, and how artfully contrived for deception is their asserted immunity. To establish the virtue of revaccination as a protection of nurses from small-pox would require an investigation and comparison of a breadth and nicety that has never been attempted, nor ever will be: for some of those chiefly concerned in the assertion know too well what would be the issue. "The nurse fable," as it is justly stigmatised, serves its purpose *ad captandum vulgus*, and was never designed for esoteric credence. The *Lancet* merely perpetuates the dreary game of make-believe, when it refers Mr. Taylor to the deaths of nurses from typhus as proof that nurses might equally die of small-pox if unprotected. It should be unnecessary to point out that typhus attacks a wider range of ages than small-pox, that it is far more infectious, and that a true comparison would run rather with nurses in contact with scarlet fever, whooping-cough, and measles.

Lord Clifton's contention that sec. 31 of the Act 30 and 31 Vic., cap. 34, was intended to apply to unvaccinated children born between Dec. 31, 1853, and Dec. 31, 1867, is in our opinion perfectly valid. The evidence is clear, and ought to be decisive. That Lord Chief Justice Cockburn should have conferred on the section a universal application can only be accounted for by his extravagant faith in vaccination, and persuasion that whatever extended its influence and repressed and harassed its adversaries was for good. That such was his temper was obvious from his demeanour and utterances on the bench. He did not even affect impartiality, but showed his sense of annoyance that the time of the Court should be wasted in hearing the arguments of a parcel of fools and fanatics. It was Cockburn who described an unvaccinated infant as "a centre of contagion," which Bompas, Q.C., straightway developed into "a flaming firebrand" that vaccination quenched. The more sensible officials at the Local Government Board would willingly see the oppression of the Vaccination Act reduced, the proposal made by the Government last year to set a limit to prosecutions and fines having their cordial support "in the interests of vaccination itself;" and if only the law were interpreted in the sense Lord Clifton sets forth the end desired might be attained without resort to Parliament. It is not for us to disdain any amelioration of the law, although at the same time we must confess that nothing has so effectually opened many eyes to the mischief and folly of vaccination as the oppressive and iniquitous administration of the compulsory Acts. The active and scientific opposition to vaccination may be said to date from the enactment of compulsion, and, set a-going, will never cease until the last warrant for the practice is wiped from the Statute-Book. Thus it is that good springs from evil, and is hastened by the intensity of the evil. An Act for Compulsory Re-Vaccination, which is so eagerly demanded in certain medical coteries, would speedily lead to that consummate victory which we so earnestly desire and work for.

Cautious folk must view with some apprehension the manner in which M. Pasteur's expectations are treated as performances, from Sir John Lubbock at the British Association to the *Daily News*, which newspaper presents an estimate of the saving that will accrue to the owners of sheep and cattle from the new vaccination, as, in contempt of etymology, it is styled. Strange to say M. Pasteur does not appear to shrink from the responsibility thus recklessly imposed upon him. Having disposed of cholera in chickens and splenic fever in herds, he is about make an end of hydrophobia, and to tackle yellow-fever itself. Still further, the *Daily News*, which has a penchant for scientific sensation, announces that a gentleman has communicated to the Academy of Sciences in Paris the discovery of a mode of vaccinating vines as a defence against the attacks of the phylloxera! It does not require much prescience to foretell that if M. Pasteur does not mind what he is about he will wreck his reputation. He bases his claim for the acceptance of his various inoculations upon the success of vaccination in preventing small-pox, taking that success as something granted and indisputable; but if the inoculations prove no more effective against their several analogues than does vaccination against small-pox, he is assuredly committing himself to a course of humbug that will terminate in disaster and dishonour.

We find from an article in the *Journal d'Hygiène*, of August 25, that Dr. Desjardins, of Nice, in a letter to the editor of the *Akhbar*, gives a complete confirmation of the syphilisation of the fifty-eight French soldiers in Algeria, on Dec. 30 last, the particulars of which we have already set before our readers. The most cautious silence, we are informed, is preserved by the military authorities; and not without reason, if vaccination is to retain its hold on popular credulity. The writer demands that the recruits be dismissed from a service to which they will be a useless appendage, and proposes to solace them with pensions for injuries which the Government cannot redress. The letter concludes with a recommendation that calf-lymph be adopted in future. It is proclaimed, apparently by an inversion of the famous line, "A rose by any other name would smell as sweet," that numerous re-vaccinations have lately been made in the garrisons of Paris and Vincennes with "lymph from the calf."

*

INTRODUCTION OF VACCINATION TO INDIA AND THE EAST.

THE furore for cow-pox in England was reproduced with access among the English in India. It is always so. What is the fashion at home is an intenser fashion abroad.

When we say India, we speak as of a country when we are dealing with a continent—of not one but many peoples, of races numerous and tongues various: wherefore, in naming India, we would be understood as limiting our remarks to the portion designated and to the population affected by English influence.

In several parts of India small-pox was endemic—begotten in permanently unwholesome conditions of life, and cultivated and propagated by inoculation. When, therefore, it was heard that cow-pox might be substituted for small-pox, and that the mild served every purpose of the severe disease, there arose a demand among the English for the virus, alike for their own and for native use. Dr. Underwood, writing to Jenner from Madras, Feb. 28, 1801, observed:—

"I have read with very great pleasure your publications on cow-pox, and feel particularly anxious to introduce and extend it in this country under the greatest confidence that it would save many lives. I have hitherto embraced every opportunity of inoculating with variolous matter, but the loss of a beautiful little patient has humbled me, and I confess I never now take up a lancet but with fear and trembling."*

It was easier to ask than to obtain. There was no cow-pox to be heard of in India, and the long voyage round the Cape and the tropical heat were fatal to its transmission. Repeated attempts were made, but all ended in failure. Jenner proposed to place a number of picked men on board an East Indiaman, and to have them successively vaccinated in the course of the voyage so as to land with virus fresh in Bombay or Calcutta; but the East India Company declined the proposal. An attempt was then made to raise a subscription for the purpose, Jenner putting his name down for 1,000 guineas; though it was difficult to imagine where the 1,000 guineas were to come from unless out of the pocket of some ardent admirer.†

These efforts were, however, superseded by the energy and ingenuity of Dr. De Carro, of Vienna. Lord Elgin, British ambassador to the Porte, had made acquaintance with De Carro, and had received virus from him with which his infant son and others were vaccinated at Constantinople. The news spreading abroad, Lord Elgin was entreated to meet the Indian demand, sending the vaccine overland to Bombay by way of Bagdad and Bussora. He made several futile attempts, and thereon determined to place the matter in the hands of De Carro; and for that purpose addressed himself to the Hon. Arthur Paget, British ambassador at Vienna, saying—

"I have so many applications for vaccine virus from Bussora, the East Indies, and Ceylon, that I beg you will immediately apply to Dr. De Carro, and request him to send some by every courier." ‡

* Baron's "Life of Jenner," vol. i., p. 410.
† Ib., p. 409. ‡ Ib., p. 419.

De Carro accepted the commission with alacrity. He had already had an application from Bagdad, and, dismissing the vehicles which had been tried and failed, such as lancets of steel, silver, gold, and ivory, and threads enclosed in quills, he saturated lint with virus, and, placing it between glasses, in one of which was a cavity for its reception, tied them together, sealed the edges, and, taking them to a wax chandler, had them dipped until enclosed in a ball of wax, which was packed in a box stuffed with shreds of paper. In this manner the virus was conveyed through Constantinople, across the deserts to Bagdad, where it was received March 31, 1802, still liquid, and was used "with complete success." The like success was reported from Bussora, Muscat, and Bushire. From Bussora the virus was conveyed to Bombay, arriving, after a three weeks' voyage, early in June. Twenty or thirty were inoculated with the Vienna virus, but only one "took," namely, Anna Dusthall, a child about three years of age, who was operated upon by Dr. Helenus Scott. The progress of the case was watched with intense anxiety, and correspondent satisfaction when the symptoms developed according to the recognised description. On the eighth day five children were vaccinated from Dusthall's arm, and loud was the rejoicing when it was known that for India was secured the genuine Variolæ Vaccinæ. From Bombay "the precious fluid" was in due course conveyed to Ceylon, Madras, Calcutta, and wherever English influence prevailed. De Carro was naturally elated with his success. The virus he transmitted was originally obtained from the stock of Dr. Sacco, of Milan, who had it off some Lombard cows.*

Jenner wrote to De Carro to congratulate him, March 28, 1803:—

"Since the commencement of our correspondence, great as my satisfaction has been in the perusal of your letters, I do not recollect when you have favoured me with one that has afforded me pleasure equal to the last. The regret I have experienced at finding that every endeavour to send the vaccine virus to India in perfection has again and again failed, is scarcely to be described to you; judge, then, what pleasure you convey in assuring me that my wishes are accomplished. I am confident that had not the opponents in this country to my ideas of the origin of the disease been so absurdly clamorous (particularly the *par nobile fratrum* †), the Asiatics would long since have enjoyed the blessings of vaccination, and many a victim been rescued from an untimely grave. The decisive experiments of Dr. Loy on this subject have silenced the tongues of these gentlemen for ever." ‡

How the denial that cow-pox originated in horse-grease prevented "the blessings of vaccination" from reaching the Asiatics, he did not condescend to explain. Perhaps he thought that in the absence of cow-pox, the English might have discovered and used horse-grease for inoculation in India, after the manner of Dr. Loy. Or if it was that he fancied that horse-grease might have borne transmission better than cow-pox, why did

* "Histoire de la Vaccination en Turquie et l'Orient." Par Jean de Carro. Vienne: 1804.
† Pearson and Woodville.
‡ Baron's "Life of Jenner," vol. i., p. 428.

he not send it? What was there in the clamorous opposition to hinder?

The imported cow-pox was diffused and recommended with energy and with fraud. Jenner, writing to Dunning, Nov. 2, 1804, says:—

"Conceiving it might be a gratification to you to see how systematically they manage vaccine affairs in India, I have sent you a copy of a paper just transmitted to me from the India House. Would to Heaven we could boast of such arrangements here!"

Here is the paper which sets forth the energetic policy pursued:—

"Fort William, Jan. 13, 1804.

"With a view of extending the practice of vaccine inoculation throughout the East India Company's territories in India, the Governor-General in Council of Bengal has appointed a Superintendent-General of Vaccine Inoculation at the Presidency, and established subordinate superintendents at several of the interior stations of the country; namely, at Dacca, Moorshedabad, Patna, Benares, Allahabad, Cawnpore, and Farruckabad. These superintendents are the surgeons of the stations, and are to act under the orders of the Superintendent-General in whatever regards vaccine inoculation. The civil surgeons also at the several judicial and revenue stations are to co-operate with these superintendents for the purpose of forwarding the general object.

"Vaccine inoculation has also been introduced with success into Prince of Wales Island, and it is intended to extend the practice to Malacca and other places to the eastward; and a confident expectation is entertained that the benefits of this valuable discovery will be diffused throughout Asia. It is even in contemplation to extend it to China; but as the suspicious disposition of the Chinese might possibly ascribe any attempt to introduce this novel practice to sinister motives, it has been postponed until the opinion of the Company's servants there can be obtained."

Much of this policy was due to the Marquis Wellesley, the Governor-General, whose habit it was to convert conviction without delay into performance. To what extent it was found practicable to substitute vaccination for variolation among the natives does not clearly appear. It was comparatively easy to operate upon those immediately dependent upon their conquerors; but it was a different matter to disarm the aversion of the external myriads. Supposing the variolaters preferred their ancient practice because it was more lucrative, a number of them were brought to Calcutta, and inquiry made as to the amount of their gains, which ascertained, they were offered double pay if they would adopt vaccination. The offer was readily accepted, and other variolators, hearing of it, volunteered their services on similar terms, and were instructed and enrolled as official vaccinators. A declaration was drawn up and signed by twenty-six of these converted variolators, recommending vaccination to the Eastern world. The declaration was published in the Calcutta Gazette, printed in four languages, and widely circulated throughout India.*

So much was possible to Government; but other means of persuasion were not neglected It was at first imagined that pox from the cow would exactly suit people who held that animal in reverence; but, on the contrary, the fact was converted by the Brahmins into an argument against its use, they contending, and justly, that cow-pox was impure. To meet this difficulty, various pious frauds were attempted. It was pretended that vaccination was no novelty in India, and that it was known, sanctioned, and practised from time immemorial. Baron, Jenner's biographer, relates these details without animadversion:—

"A native physician of Bareilly put into the hands of Mr. Gillman, who was surgeon at that station, some leaves purporting to be an extract from a Sanscrit work on medicine, entitled 'Sud'ha Sangreha,' by a physician named Mahadeva, to this effect:—

"'Take the matter of pustules, which are naturally produced on the teats of cows, carefully preserve it, and before the breaking out of small-pox make with a fine instrument a small puncture (like that made by a gnat) in a child's limb, and introduce into the blood as much of that matter as is measured by a quarter of a ratti. Thus the wise physician renders the child secure from the eruption of the small-pox.'"

The Sanscrit work from which this passage was asserted to be taken was never forthcoming, and by competent authorities was pronounced "nothing more than a well-meant device for the reduction of ignorant prejudices," the native physician who put the leaves into the hands of Mr. Gillman being included in the fiction. Baron continues:—

"In order to overcome these native prejudices the late Mr. Ellis, of Madras, who was well versed in Sanscrit literature, actually composed a short poem in that language on vaccination. The poem was written on old paper, and was said to have been *found*, that the impression of its antiquity might assist the effect intended to be produced on the minds of the Brahmins while tracing the prevention to their sacred cow.

"The late Mr. Anderson, of Madras, adopted the very same expedient, in order to deceive the Hindoos into a belief that vaccination was an ancient practice of their own. It is scarcely necessary to observe that had any authentic record of such a practice existed these gentlemen would never have resorted to such contrivances to gain their object."*

These impostors were not priests, but medical men; not Jesuits, but Protestants; not Levantines, but Englishmen in the service of the Hon. East India Company. To what extent their frauds were operative is not related. They were probably too contemptuous of native acumen. For good and for evil the Hindoo listens to English advice courteously and without contradiction, but persists in his accustomed way of life with the equanimity of indifference. That vaccination was an ancient practice in India came to be repeated in Europe and seriously believed, when, Jenner's originality being impugned, the truth came out, that old Indian vaccination was a

* "The History and Practice of Vaccination." By James Moore. London: 1817. P. 236.

* Baron's "Life of Jenner," vol. i., pp. 556—559.

device limited to Indian circumstances, and never designed for Western acceptance.

In Madras vaccination was practised with much energy. Jenner, writing on May 7, 1808, says: "Wonderful to relate, the numbers vaccinated in that Presidency in the course of last year amount to 243,175."* In Bombay it was claimed that small-pox was extirpated, Dr. Helenus Scott reporting, Dec. 5, 1806, that "in this island, swarming with mankind, no loss from small-pox has been suffered for several years since the introduction of vaccine inoculation."† It was not pretended that all the inhabitants of Bombay had been vaccinated, or even a considerable portion of them; but the early vaccinators appear to have regarded vaccination as a sort of charm, the possession of which kept off small-pox; that by the vaccination, say, of one-tenth of any given population, the unvaccinated nine-tenths were protected. This faith in the vicarious efficacy of vaccination was not expressly avowed, but was implied in the numerous reports of extirpated small-pox in circumstances where no attempt was made, or was indeed possible, to effect universal vaccination.

Confuted and frustrated in England, it was Jenner's habit to sigh, and turn from his ungrateful country to the vast realms of Europe, and Asia, and America. Writing to Dunning, December 23, 1804, he observed:—

"Foreigners hear, with the utmost astonishment, that 'in some parts of England there are persons who still inoculate for small-pox.' It must, indeed, excite their wonder when they see that disease totally exterminated in some of their largest cities and in wide-extended districts around them."

Mark the words—Small-pox totally exterminated in some of the largest cities in 1804; that was to say, after, *at the utmost*, five years' acquaintance with vaccination! A miraculous time—was it not? Jenner proceeds:—

"Let us not, my friends, vex ourselves too much at what we see here. Let us consider this country as but a speck when compared with the wide surface of our planet, over which, thank God! Vaccinia has everywhere shed her influence. From the potentate to the peasant, in every country but this, she is received with grateful and open arms. What an admirable arrangement is that made by the Marquis Wellesley, the Governor General of India, for extermination of the small-pox in that quarter of the globe! Contrasted with our efforts here, what pygmies we appear!" ‡

Omne ignotum pro magnifico est. What inference worth a straw could Jenner, or anyone else, draw from the introduction of vaccination to India? The number of the various Indian peoples was unknown; and the periods and prevalence of small-pox among them; also the extent to which they practised variolation. In the absence of such elementary information, tales of the triumphs of vaccination in India were as so much romance.

So far as vaccination displaced variolation, it might be taken as the substitution of a less evil for a greater; and much is accounted for in some of the early records of vaccination, when it is remembered that the new practice was welcomed as a deliverance from the inconveniences and horrors of the old; and that the discredited practice was frequently abandoned without resort to its successor. A cessation of variolation was a cessation of the culture and diffusion of small-pox; and vaccination had often the credit of the reduction of small-pox when the credit was due to the abatement of variolation. As to the propagation of small-pox by variolation, no one was more emphatic than Jenner, as for example:—

"Where variolous inoculation is put in practice, the disease must necessarily spread."*

"Small-pox will never be subdued so long as men can be hired to spread the contagion by inoculation."†

If then it be taken as conceded, that variolation spread small-pox wherever practised, can it be fair to omit the consideration of the consequences of its abatement when estimating the results of the introduction of vaccination? Yet scarcely an advocate of vaccination permits the fact to enter into his reckoning!

The gratitude of the English in India to Jenner did not evaporate without substantial expression. A subscription was started, and between 1806 and 1812 he received remittances to the amount of £7,383, the contributors being—

Bengal	£4,000
Bombay	2,000
Madras	1,383

An amusing instance of Jenner's ignorance of India is found in a letter to Dunning, March 14 1807, wherein he ascribes his English money from India to the gratitude of Hindoo women:—

"You will be pleased to hear," he writes, "that the *dingy* Hindoo ladies are convincing me of their grateful remembrance, not merely by words, but by a *tangible* offering, while my *fair* Christian countrywomen pass me unheeded by." ‡

Jenner, in returning thanks to Dr. Fleming, of Calcutta, for the first remittance of cash in 1806, took occasion to communicate some English news, which is not without interest at this day. He wrote:—

"To say the truth, this country has been dreadfully supine in the matter of vaccination hitherto. Some pamphlets, full of the grossest misrepresentations and forgeries, have been spread; and the common people became so terrified, particularly when told that their children, if vaccinated, would take the similitudes of bulls and cows, that a great dislike to the practice has arisen among them; and these accounts have been circulated through the country with peculiar industry. The consequence has been the re-introduction of variolous inoculation, which has produced an epidemic small-pox through the metropolis and the whole island, except in those parts where vaccination had previously been so generally adopted as to forbid its approach. This, now too late, has opened their eyes, and they see the powers of the cow-pox. The folly of the oppositionists has gone so far as to exhibit prints of children undergoing trans-

* Baron's "Life of Jenner," vol. ii., p. 359.
† Ib., vol. ii., p. 92. ‡ Ib., vol. ii., p. 24.

* Letter to Dunning, Dec. 23, 1804.
† Letter to Worthington, May 4, 1810.
‡ Baron's "Life of Jenner," vol. ii., p. 356.

formation from the human being into that of the brute."*

These prints were, many of them, intended for fun, and could have no serious influence. The decline of faith in vaccination was due to the general discovery that it did *not* prevent small-pox, and that it *did* excite other ailments. "It made small-pox milder" was the apology even then coming into vogue. As for the epidemic of small-pox raised in London and the whole island by the neglect of vaccination and a return to variolation, it was a creation of Jenner's fancy. There was less small-pox in London in 1806 than in 1805; but if there was not more, the bold Jennerian would answer, there *ought* to have been, and it could only be through the mercy of Providence that there was not.

We now come to Ceylon, in which vaccination was held to have had a perfect triumph. "To Sweden and to Ceylon," says Baron, "Dr. Jenner was in the habit of pointing when he wished to prove what his discovery might accomplish; or when he lamented that fatal obstinacy of his fellow-creatures which, with such examples before them, could induce them to reject blessings within their reach."† Sweden we shall discuss at another time; and of Ceylon we may observe that a portion of the island was taken by the British from the Dutch in 1795, and in several parts was extremely unhealthy. Small-pox was a frequent and deadly epidemic, but to what extent there is no evidence save hearsay and estimates from hearsay. The Dutch did not concern themselves with the health of the natives, but when the English took over their settlements in 1800 in the midst of a severe epidemic, they opened hospitals for small-pox and for inoculation with small-pox under the supervision of Dr. Christie.‡ He, hearing the glad tidings of vaccination, resolved to introduce the practice, and having in 1802 received virus from Dr. Scott, of Bombay, he set to work with systematic energy and perseverance. Supported by the authority of successive Governors, he closed the hospitals, forbade variolation, organised a staff of vaccinators, and kept them employed, until the greater part of the population under English influence was vaccinated. In the words of Moore, writing in 1816:—

"At length the priesthood submitted to vaccination, the last to adopt this innovation upon their ancient customs; and the remains of the small-pox were happily extinguished in all that part of the island which belonged to Great Britain." ||

That small-pox had been exterminated by vaccination in Ceylon was set forth by vaccinators as something indisputable; but there were two observations to make—first, that small-pox was often suppressed in the sense that for a time there was no small-pox in a certain population, and especially subsequent to a severe epidemic; and second, that variolation was suppressed. Granted that small-pox ceased in Ceylon coincidently with the introduction of vaccination, it may be fairly held that the exhaustion induced by the preceding epidemic, and the cessation of variolation, were sufficient to account for the phenomenon. What remains to be said of Ceylon, we shall leave Dr. Gregory, physician of the London Small-Pox and Vaccination Hospital, to say for us. He writes:—

"Ceylon was the British colony where the Government earliest interfered and most vigorously encouraged the practice of vaccination. Salaried vaccinators were scattered over the whole island. So successful were their labours, that up to the beginning of 1819, it had often been said that the experiment of exterminating small-pox had been made and successfully carried out in Ceylon. In July, 1819, however, a severe epidemic small-pox broke out there. In 1830 a second epidemic overspread the island—in 1833 a third, and in 1836 a fourth. In these four epidemics, 12,557 persons were attacked, of whom 4,090 died, being at the rate of 33 per cent., or one out of every three.

"In each of these epidemics a certain number of vaccinated persons took small-pox. The proportion of the vaccinated to the unprotected varied. In the third epidemic, out of a total of 460 attacked, 341 represented themselves as vaccinated." *

Vaccination was introduced to China from the English factory at Canton, and Sir George Staunton translated into Chinese a tract of Dr. Pearson's on cow-pox, and had it printed at Canton in 1805, the translator's name and the foreign origin of the practice being suppressed. Jenner, writing to Dunning, Dec. 10, 1806, says:—

"From Canton I have a most curious production—a pamphlet on vaccination in the Chinese language. Little did I think, my friend, when our correspondence first began, that Heaven had in store for me such abundant happiness. May I be grateful!" †

His happiness and gratitude would have suffered mitigation could he have discerned under the Chinese characters the hand of Dr. Pearson, "whose dirty name," he said to Dunning on another occasion, "shall not daub my paper."‡

The Chinese had their own system of variolation, namely, the use of pulverised small-pox scabs as snuff; but some of them accepted vaccination, tried it, and dropped it when they found it did not keep off the disease as warranted. Small-pox in China is almost exclusively a disease of childhood, and is little dreaded. Dr. Rennie, medical officer to the British Embassy at Peking in 1861-62, says of that city:—

"Since 1820 vaccination (introduced from Canton) has been practised to a limited extent among the population—probably one-fifth may be vaccinated. At one time it was believed to afford protection, small-pox not having been so common immediately after its introduction. Of recent years, however, confidence in it has considerably diminished, owing to the frequency with which those are attacked who have been vaccinated." ||

* Baron's "Life of Jenner," vol. ii., p. 89.
† Ib., vol. i., p. 426.
‡ "An Account of the Introduction, Progress, and Success of Vaccination in Ceylon." By Thomas Christie, M.D. London: 1811.
|| "The History and Practice of Vaccination." By James Moore. London: 1817. P. 242.

* "Lectures on the Eruptive Fevers, delivered in St. Thomas's Hospital in January, 1843." By George Gregory, M.D. London: 1843. P. 210.
† Baron's "Life of Jenner," vol. ii., pp. 84, 356.
‡ Ib., vol. ii., p. 342.
|| "Peking and the Pekingese." By D. F. Rennie, M.D. London: 1865.

Persia was sometimes referred to in the ravings that went on as to the triumphs of vaccination in the East; but what was known of Persia? The practice was introduced where Europeans were resident, but it never became general. Dr. C. J. Wills has recently described surgery and medicine in Persia as extremely rude and superstitious, and that "vaccination is not in favour, whilst inoculation, or the direct communication of the disorder, by placing the patient in the same bed with one suffering from small-pox of the most virulent type, is the method pursued."*

It was natural enough for Jenner, in presence of failure and contempt in England, to appeal to success in the East, and to try to overwhelm his adversaries with evidence which they could not overtake; but any one of judicial temper must have perceived that if vaccination was to be vindicated, data of a very different order would have to be forthcoming. Where the number of the population in a distant region was unknown, where the ordinary prevalence of small-pox among the people was undefined, where the extent of artificial variolation was unspecified, and the existence and intensity of related forms of zymotic disease were undescribed, what conclusion could be drawn as to the efficacy of vaccination that a man of science was bound to respect? Why should certain knowledge in England be surrendered for uncertain information from abroad?

CIRCULAR LOGIC.—The vaccination logic in vogue is of the finest circular type. No perfectly vaccinated person can have small-pox. If any one has had small-pox, it proves that he was imperfectly vaccinated—q.e.d. So of those who die—either the marks are obliterated by the disease, or they were badly made, or there were not enough of them, or they were too old. And children too puny or diseased to be vaccinated, when they die of small-pox, thereby prove the necessity of vaccination. The curious fact remains, that London has not had so low a death-rate for years as during the height of the recent epidemic.—*Herald of Health.*

GOOD SENSE BEFOGGED.—R. Pringle, M.D., Sanitary Commissioner in North-West India, writing in the *Lancet*, Sept. 2, says:—"Much has been written about the modification produced by vaccination when a successful case of vaccination subsequently suffers from variola, but the only modification I have ever noticed was that the variolous disease appeared, as a rule, in a milder type, and left fewer permanent cicatrices."—No difference between the vaccinated and the unvaccinated, only the disease made milder! How do you know, Dr. Pringle? Like scarlet fever, small-pox is of all degrees of intensity, and what makes scarlet fever mild in one case and severe in another? Suppose there were some hocus-pocus like vaccination practised to prevent scarlet fever, should we not be told that the mild cases were due to the said hocus-pocus? Until it is ascertained how severe a case of small-pox would be without vaccination, how can it be known how mild it has been made by by vaccination? A physician like Dr. Pringle should be ashamed to deal in such unverifiable conjectures, confusing his own intelligence, and perpetuating the confusion of others.

* *British Medical Journal*, April 26, 1879.

VACCINO-TUBERCLE.

A VAGUE suspicion that tubercular disease may be communicated or intensified by the process of vaccination pervades nearly all of the writings of anti-vaccinators from Dr. Squirrell* to the present time, and of some of the more candid authors on the other side of the question. It is desirable that the information available on the subject should be collated, its value estimated, and the charges against vaccination (if such there be) clearly formulated, and this paper is an attempt to fulfil in some way these indications.

Vaccino-syphilis, first observed by Dr. Moseley, the anti-vaccinator, in 1805, and for 70 years contested with more warmth than discretion by the *élite* of the medical world, has now passed from the stage of angry discussion into that of acknowledged fact, and it is only by similar ventilation of the subject, coupled with continued observation and experiment, that the truth about vaccino-tubercle can be ultimately arrived at.

Scrofula or tuberculosis may be defined, or rather described, as a general infective disease characterised by the development of distinctive miscroscopical elements, the result of a low inflammation and tending to caseous degeneration. It is *not* a specific disease, it *is* communicable by inoculation, and it *can* be produced by artificial cultivation. A belief in the infective nature of tubercle has been rapidly gaining ground during the last twenty years, and is even more fully recognised on the Continent than here. Buhl was the first to start the idea, which was followed up and verified experimentally by Villemin, Klebs, and Burdon Sanderson, the result of whose experiments was to show "that the development of general tuberculosis is not due to anything specific in the substances inoculated, but that the products of various inflammations (for the most part *inflammations of slight intensity*) may constitute the infective agents."† In 1880 Cohnheim declared "the test for tubercle" to be "the capacity of a morbid product, when introduced into the body of a rabbit or guinea-pig, to produce tuberculosis in the animal. What produces tuberculosis is tubercle; what fails to produce it is not tubercle";‡ while Wilson Fox had previously shown that vaccine lymph introduced into the body of a guinea-pig *does* produce tuberculosis in the animal. The experiment was repeated four times, in all with fatal success, *post-mortem* several organs being found to contain tubercle "as intense and typical" as in animals inoculated with crude tubercular matter.§ Tubercle has also been communicated to hens by vaccination.‖ If Cohnheim's test be true, the inference is inevitable that vaccine lymph is tubercle. The conclusion is as startling as it is logical, but becomes less surprising when the original source of the vaccine lymph is ascertained, and its mode of propagation understood.

Man is not the only animal afflicted with turber-

* "Observations addressed to the Public in general on the Cow-pox, showing that it originates in the Scrophula." R. Squirrell, M.D. 1805.

† "Pathology and Morbid Anatomy." T. H. Green, M.D. 1878. P. 228.

‡ "Die Tuberkulose." J. Cohnheim. Leipzig, 1880.

§ "The Artificial Production of Tubercle." Wilson Fox 1868.

‖ "Transactions of Pathological Society," vol. xxiii.

cular disease; the horse and the cow have each their respective scrofula, an important fact to bear in mind when dealing with horse-grease and cow-pox. The equine analogue of scrofula is glanders, farcy, or grease from which Jenner's "true and not the spurious" pox was obtained," and this lymph, which is still in use and has passed through countless constitutions, is surely not the last thing in the world to be suspected of disseminating scrofulous diseases. "What glanders is to solipeds, margarosis or tuberculosis is to the bovine species,"* and cows thus affected are neither few nor far between. Mr. Fleming reckons "5 per cent. of our bovines as infected,"* while, in parts of Saxony, according to Wolff, the percentage, is as high as 20 per cent.! Dr. Creighton,† in a careful monograph, shows that this bovine tuberculosis (Perlsucht) may be conveyed to man through the lymph, then, *à fortiori*, it may be presumed to be conveyed through the inflammatory lymph of a vaccine lymph of a vaccine vesicle, for we are assured "the lymph is viruliferous."*

If demonstration be demanded, it is at hand: "M. Toussaint vaccinated a cow in an advanced stage of tuberculosis with lymph absolutely pure. The vesicles progressed normally, and with the lymph obtained from them he vaccinated different animals, all of whom subsequently became tuberculous."‡ "The significance of these experiments," says the editor of the *Medical Times*, "can scarcely be over-rated, for though a judicious vaccinator would not use lymph taken from a child who exhibited already evidence of the disease, the chances of cows in whom spontaneous vaccinia may appear, and whose lymph would at the present time be eagerly sought after, being, like so many of their species, tuberculous, would be great; and it would seem in consequence that *the dangers of animal vaccination may be greater than those of human*, which are supposed to be avoided by having recourse to the cow." Add to this that hundreds of scofulous children are being used as vaccinifers, and from whom the lymph may pick up tubercle, if, indeed, it be not already charged with it, and the danger becomes a formidable one.

Strong as the case may seem, it may be made even stronger, and the truth of the inference drawn from Cohnheim's dictum rendered still more plausible.

It has been said above that the tubercular poison can be obtained by artificial cultivation, and the process of manufacture is as follows: A chemical irritant is applied to the skin of a guinea-pig or rabbit, a vesicle results, the lymph from which is successively inoculated on a series of animals, till a powerful poison is obtained, which poison in its milder action produces unmistakable tubercular disease.§ Would it be straining a point to suggest an analogy between this process and that of arm-to-arm vaccination, children being substituted for guinea-pigs? If not, another argument is added to support the belief that vaccine lymph is tubercle, or capable of producing tuberculosis.

Statistics, far from destroying, corroborate in a striking manner the arguments based on purely pathological considerations, the deaths of infants from skin diseases, scrofula, and mesenteric disease (the infantile manifestations of the tubercular diathesis) having progressively increased with increased vaccination.

AVERAGE YEARLY DEATHS UNDER ONE YEAR OF AGE PER 1,000,000 BIRTHS.

(England and Wales.)

	Skin Diseases.	Scrofula.	Mesenteric Disease.
Vaccination voluntary, 1847-53	183	351	2,981
Vaccination obligatory, 1853-67	253	611	3,371
Vaccination enforced, 1867-78	343	908	4,373

Albeit the general death-rate has declined.

Then, again, Dr. Spinzig, in his valuable work* on the subject, shows that if places where vaccination and re-vaccination are general be compared with places where these are little practised, in respect of mortality from tubercular disease, the conclusion seems irresistible that some causal connection obtains between the prevalence of vaccination and the prevalence of tubercle:—

	Places.	Deaths from Pulmonary Tuberculosis per 1,000 deaths.
Badly vaccinated.	Rome	60
	Naples	80
	Genoa	97
	Cities of France	100
Much vaccinated.	Glasgow	139
	Berlin	145
	New York	146
	Vienna	200
	Massachusetts	222

Dr. Niemeyer, of Tübingen, a great authority on tubercle, writes:—"It cannot be denied that vaccination sometimes endangers life, and in other cases leaves permanent impairment of health, especially cutaneous diseases and other *scrofulous* affections, due to the debilitating influence of the fever accompanying the vaccinia."†

Such then is our knowledge concerning vaccino-tubercle at the present time. If the evidence be not conclusive, it is, at least, sufficient to necessitate further inquiry; and, for my own part, I am not doubtful as to the result.

The conclusions warranted by the foregoing facts may be summarised as follows:—

1. Tubercle is non-specific, is inoculable; may be cultivated artificially.

2. Vaccine lymph, judged by Cohnheim's test, is tubercle.

3. Vaccination of healthy animals from tuberculous animals may convey the disease from the latter to the former.

4. "Horse-grease Cowpox" is inherently and essentially tuberculous.

5. Tubercle is a common disease of cows, and

* "Tuberculosis from a Sanitary and Pathological Point of View." G. Fleming, F.R.C.V.S. 1881.

† "Bovine Tuberculosis." Creighton. 1881.

‡ *Medical Times and Gazette*, Sept. 3, 1881.

§ Public Health Reports, New Series. No. II.

* "Variola, its Causes, Nature, and Prophylaxis, and the Dangers of Vaccination." By C. Spinzig, M.D. St. Louis, 1878.

† "Textbook of Medicine." Dr. Felix von Niemeyer. 1879.

may be conveyed to man through the milk or lymph.

6. Arm-to-arm vaccination is a system admirably adapted for the culture of tubercular diseases.

W. J. COLLINS, B.Sc., M.R.C.S.

St. Bartholomew's Hospital.

LORD CLIFTON ON THE TRUE INTENT AND MEANING OF SECTION 31 OF THE VACCINATION ACT OF 1867.

"I THINK Section 31 of the 1867 Act must go at last. I can prove to demonstration it was only meant to apply to children born between Dec. 31, 1853, and Jan. 1, 1868. As soon as the Act of 1853 was repealed by the Act of 1867, children born in the interval could only be touched by retrospective enactment. Hence Section 31, which merely epitomises the procedure of the rest of the Act, with the addition of a preliminary magistrate's order in order to give jurisdiction. In the case of children born since 1867, there is jurisdiction without an order, and it is, therefore, illegal to exercise a second jurisdiction in the same case. If, therefore, 'Pilcher *v.* Stafford' still holds good as to Section 29, there can only be one conviction for each child, and that must be within fifteen months of birth. Cockburn was completely misled as to the Parliamentary history of Section 31, or he would not have given such a decision in Allen *v.* Worthy.

"The Houses of Parliament do not interfere with a common law principle like that of a single conviction for a single offence, nor is it in the power of mere words to do so. Parliament provides means for taking proceedings, and the Courts decide whether they can be repeated. But Cockburn thought that somehow he was bound to give due effect to Sec. 31, not knowing its true history.

"Appearances under Sec. 31 must be *refused;* for, although a parent may appear without the child, they cannot make an order without *some* appearance. Anti-vaccinists all over the country should refuse to recognise the right of magistrates to command appearance or make orders for vaccination.

"Cobham Hall, *Aug.* 29, 1881."

NATIONAL ANTI-COMPULSORY VACCINATION LEAGUE.

THE seventh annual conference was held at Brighton on September 20 and 21, under the presidency of Mr. W. Hume-Rothery. There were between fifty and sixty delegates present from various parts of the Kingdom; and a large and influential public meeting was held in the Town Hall, at which there was much excellent speaking. As a full account of the proceedings appears in the October number of the NATIONAL ANTI-COMPULSORY VACCINATION REPORTER, it is unnecessary for us to go over the same ground, especially as the pressure on our space exceeds our limits. The absence of Mrs. Hume-Rothery and Mr. W. Gibson Ward from the conference, owing to illness, was much regretted.

"COMPULSION MUST GO."

THE *Edinburgh Evening News* of Sept. 17 had the following excellent article on the repeated prosecution of Mr. Thomas Strain, of Belfast, and Mr. P. A. Taylor's refutation of Dr. Carpenter's fallacies:—

It would be interesting to have a deliberate and well-weighed expression of opinion from any leading statesman or jurist on the case of Mr. Strain, of Belfast, who was yesterday fined for the fifth time for refusing to have his child vaccinated. The judicial contention is that the health of the community is endangered through Mr. Strain's child remaining unvaccinated. The child still remains unvaccinated, and to all appearance will continue so. Mr. Strain will go on paying fines as long as his purse holds out. Should it be exhausted, he will probably go to jail; and still the child will be unvaccinated. It becomes an imperative question whether the Legislature is going to tolerate any longer such imbecilities of procedure; whether it will enact that when parents refuse to have their children vaccinated the operation shall be performed by force; or whether it will put an end to compulsion in regard to vaccination. It is plain to any reasoning mind that the present course is preposterous. If refusal to vaccinate is as criminal and dangerous an attitude as the law and the medical profession say it is, compulsion must be made real. At present it is palpably illusory. Fining parents can scarcely be represented as likely to check small-pox. But those who fully realise how absurd has been the operation of the law will probably be inclined to ask themselves seriously whether the legislators and medical men who have superintended its action with such complacency have shown flawless wisdom in their preliminary reasonings. That this question is likely ere long to be asked by a tolerably large section of the public seems probable, in view of the discussion of the subject that is going on at present. There is just published, in the form of a penny pamphlet, a letter on Vaccination, from Mr. P. A. Taylor, M.P., to Dr. W. B. Carpenter, concerning which it is not too much to say that it is by far the most staggering presentation of the case against vaccination that has yet come before the general public. Whatever may be the truth about vaccination, and that is obviously not to be settled by one pamphlet, it will be admitted by any impartial reader that in respect of general cogency and controversial force the pamphlet is in every way superior to the article of Dr. Carpenter to which it is a reply. It is not merely that the writer presents his own case powerfully; but that he exposes an amount of recklessness on the part of his opponents in the way of accepting false statements, garbling statistics, and suppressing awkward facts, which excites feelings of the gravest surprise. It is the duty of every medical man to read that pamphlet, which is issued by the London Society for the Abolition of Compulsory Vaccination, and the business of the most capable to answer it, if they can. Mr. Taylor quotes the admission of a physician of reputation that his statistics "have never come under the cognisance of the medical profession." Unless the public mind can be reassured by a demonstration—far more effectual than any yet achieved—that Mr. Taylor's statements are fallacious, it is scarcely possible to doubt that, in the words of the physician referred to, "anyhow, compulsion must go."

THE INTERNATIONAL MEDICAL CONGRESS AND SANITATION.

By William Tebb.

In the month of August an International Medical Congress was held in London, the largest, probably, ever assembled; but although, in one section or another, almost every subject relating to medicine and surgery was brought up for discussion, vaccination was only indirectly referred to. The Committee of Management was, no doubt, aware that at the discussions recently held by the Academy of Medicine in Paris on M. Liouville's *Projet de loi;* at the Belgian Academy of Medicine, as well as at the Calf Lymph Conference of the British Medical Society in London, in December, 1879, the utmost confusion of opinion prevailed. On this last occasion, not only was compulsory vaccination assailed as unjust and tyrannical, but evidence was brought forward by members of the British Medical Society, showing that the practice was attended with serious risks, and occasionally followed by fatal results, with whatever the lymph, and that it neither prevented nor mitigated small-pox. Vaccination could not have been introduced without exciting considerable opposition, and destroying that harmony which it was considered important to preserve. For these and other reasons, the subject was prudently ignored. The vaccination of animals, however, is another matter, and as Jenner's contemporaries pretended that vaccination would prevent the distemper in dogs, and the existence of a canine vaccinating establishment in London is well known, there could be no likelihood of opposition to a project for vaccinating chickens and sheep. It was reserved, therefore, for Professor Pasteur to read a paper, explaining his recent discoveries on the inoculation of fowls for chicken cholera, and of sheep for charbon, or splenic fever; although I believe neither of these diseases prevails in England. After pointing out the nature, properties, and mode of culture of the virus with which the fowls were inoculated, M. Pasteur stated that the oxygen of the air was capable of extinguishing the virulence of the *microbes* of chicken cholera and rendering them innocuous, in short, of destroying their power to spread disease altogether. "May we not here," continues the learned lecturer, "be in the presence of a general law applicable to all kinds of virus, and what benefits may be the result?" "Just so," says the sanitarian; "but why not, instead of poisoning the blood of fowls, and tainting their flesh with this concentration of disease, try the agency of the oxygen in cleansing the poisonous habitat of the fowls, where the disease is developed, and thus prevent chicken cholera altogether." This natural and rational process is surely not the less scientific because of its simplicity. Similarly with the later triumphs of Professor Pasteur's experiments, which have not only been hailed with unbounded delight by the entire medical profession, but seem to have excited the attention and interest of the chief of our own vaccination department, Mr. Dodson. The disease known as *charbon*, it is said, proves fatal to sheep in France every year to the value of 20,000,000 francs. It originates in anthracoid germs brought to the surface by worms generated in the bodies of diseased animals. The sheep eat these worms as they ascend in the roots of the grass. Professor Pasteur discovered that he could in like manner extract an ichorous fluid or virus from the bodies of these worms, and by inoculating the sheep therewith enable them to eat the poisonous germs with impunity. And already the demand for this virus, like that of any other nostrum receiving such a first-class advertisement, is so great as to constitute a strain upon the learned discoverer's sources of supply. Nothing is revealed as to whether this wholesale contamination of the flesh of the sheep with the ulcerous matter may not deteriorate its quality, and engender disease in those who partake of it as food. This is a question which concerns the hygieist and sanitarian, who seek to prevent disease by purifying the sources of disease, but which to those whose chief function is not the prevention but the treatment of disease can only possess a superficial interest. Professor Pasteur and his disciples virtually say, let disease and the causes of disease continue. Let the French farmers continue to bury their diseased carcasses—the pestiferous hot-beds of a vile and mischievous growth; let the poisonous germs be propagated, and we will sell you our antidote. The sanitarian, with a truer philosophy, says, remove the ascertained cause of splenic fever altogether; instead of burying the dead carcasses where the sheep feed, burn or otherwise destroy them, and thus prevent the growth of the disease germs.

To prevent disease is not, however, consistent with the prosperity or triumphs of medical science any more than to prevent litigation is advantageous to the legal profession, or to prevent wars to the advancement of military chieftains; nevertheless, sanitation, or the common-sense method, is growing in the public mind, and ere long the medical profession will be compelled, by an enlightened public opinion, to relinquish a system which must crumble to pieces owing to its own inherent falsity.

M. Pasteur promises other discoveries in the same direction, and thus we have the encouraging prospect before us of soon having the whole category of diseases inoculated into the animal kingdom, scattering the germs of corruption, and tainting the flesh of bird, beast, and man in the interests of science.* Such an opportunity as Professor Pasteur's exposition afforded could not be permitted to pass without an eulogistic allusion to the services of Dr. Edward Jenner in the introduction of vaccination,—a man who has caused unparalleled mischief to the human family by deteriorating the health of the people, and causing the deaths of unnumbered thousands. I do not, however, charge upon Dr. Jenner the cruelty and injustice arising out of the coercion used by his misguided followers. He believed that vaccination would annihilate small-pox and become universal through the force of its inherent ad-

* Dr. Farr, in the Thirteenth Annual Report of the Registrar-General, says:—"To operate on the mortality, protection against every one of the fatal zymotic diseases is required, otherwise the suppression of one disease element opens the way to others."

vantages. What Professor Pasteur demonstrated as to the hygienic properties of the oxygen in the air in destroying the virus of poisonous germs in animals, other speakers at the London Medical Congress showed was equally potent in destroying the infectious nature of other diseases. Dr. J. S. Billings, of New York, showed that want of cleanliness was the cause of disease, that in America "yellow fever cities were *filthy cities*, and yellow fever ships were *filthy ships*," and Dr. H. MacCormac, of London, stated that the poison of typhus, scarlet fever, or diphtheria, when diluted by pure air, ceases to be communicable; but when this dilution by means of ventilation is neglected, wholesale contamination with the poisonous effluvia generally supervenes. What is true concerning these diseases is equally true of small-pox. The immunity from infection claimed for nurses and doctors is no more due to vaccination in the one case than the other; both are due to insusceptibility and to sanitation, and the sooner this truth is recognised by all who have charge of the sick, whether physicians, relatives, visitors, or nurses, the better for the community at large. The most salient truths are, however, often the last perceived. We are scourged into the adoption of the plainest teachings of experience by the penalties of suffering and death. Had we not been blinded by prejudice, the disgusting filthiness of vaccination, to say nothing of its unphysiological mode of application, would long since have produced its condemnation and abolition. Instead of which, England has allowed laws to be enacted which in fifty years' time will be looked upon as an amazing monument of the miserable superstition and fanatical folly of the nineteenth century.

Mr. James Jenkins, of Mold, writes:—"Being in the centre of coal, lead, brick, and tin-plate works, I have been much impressed with the strong feeling which prevails among our skilled artisans against compulsory vaccination."

Why?—In a village of a thousand inhabitants, two neglected children die of small-pox in a dirty alley; and immediately there is a panic, and respectable people of all ages hasten to be revaccinated. If the two children had died of any other fever, none would have cared. Why? If there was not money to be had by vaccination, would small-pox be such a bogey?

A Bit of Good Sense.—W. D. gives his personal experience, and thinks it conclusive that re-vaccination is a safeguard. In contradistinction to his experience I would state mine. In China small-pox is at all times prevalent, owing to the dirty habits of the people; but a few years ago it became terrible in its ravages. Many Europeans took the disease; some died, many were sadly marred by it. An order was issued by a large shipping firm, requiring all their officers to get re-vaccinated. I objected, and did not get done; and although I saw others who had been vaccinated attacked, and even visited some of them in hospital, I escaped. The inference I would draw is this, that the best safeguard for this, or, in fact, any disease, is cleanliness, fresh air and exercise, with proper attention to one's diet.—J. P. in *Glasgow Herald*, June 30, 1881

THE CASE OF WILLIAM ESCOTT.

In connection with vaccination it is difficult to say what is extraordinary. So powerful is the delusion, so invincible the prejudice, that men, ordinarily accounted rational and benevolent, exhibit themselves as credulous, mendacious, malicious, furious, with all the characteristics of fanaticism, fully persuaded that in their wickedness they are doing God and man service. The case of William Escott is a narrative that vividly illustrates the temper and tactics of the more virulent vaccinators, and the extremities of misrepresentation to which they do not hesitate to resort. The story stands in need of little commentary. The facts set forth in order speak for themselves and convey their own moral. First let us peruse the report of—

A Meeting of the Rotherhithe Vestry,

held on Tuesday, Sept. 6, the Rector, the Rev. E. J. Beck, occupying the chair, when a letter was read from the Local Government Board, covering one received from Dr. Beech Johnston, public vaccinator, addressed to their Inspector, Dr. Stevens, respecting an outbreak of small-pox in the parish of Rotherhithe. Dr. Johnston's letter was as follows:—

"St. Olave's Union, Vaccination Station.
"44, Lower-road, Rotherhithe, S.E., Aug. 17, 1881.

"Dear Sir,—I have the honour to submit to you the following facts in connection with an outbreak of small-pox in my district:—William Escott, shoemaker, of 298, Southwark-park-road, has been for many years a leading anti-vaccinator in this neighbourhood. He has so evaded the Act that no member of his family has been vaccinated. About two months since one of his children became ill with small-pox. No medical man was called in, but the child's mother nursed him through the disease, and the child got well. Immediately after this the mother became seriously ill, and a neighbouring practitioner, Mr. Freston, of Southwark-park-road, was called in, and found his patient delirious, with high temperature, &c., but without marked eruption. As no information was given him of the presence of small-pox in the house, his attention was not directed to this disease, and the patient died on the third day, and the death was certified 'fever.' Mr. Freston now assures me that he is of opinion the disease was really small-pox in such a virulent form that death occurred before the eruption appeared, and subsequent events would appear to justify that opinion. Immediately after Mrs. Escott's death, two of her children became ill with confluent small-pox, and both died; and I have this day certified for the removal to the hospital of three others, aged 11, 9, and 7 years, who have been suffering from a most virulent attack of the same disease. After the death of his wife, Escott borrowed of a neighbour named Angus a suit of black clothes in order to attend the funeral. The clothes were kept some days in Escott's house, and then returned. The result was that Angus got small-pox, was removed to hospital, and died there on the 14th inst. Angus stated that he had been vaccinated in infancy. Nearly every house in Escott's immediate neighbourhood has since then been infected, and I give you below a list of cases moved to hospital from this spot during the last month. Many other cases have been and are being treated by private practi-

tioners.—I remain, dear sir, your obedient servant, W. Beech Johnston, M.D., Public Vaccinator, No. 3 District, St. Olave's Union."

The Clerk, who read the letter, said sixteen names of patients were attached. The matter came before the magistrate that day, Escott being summoned for refusing to allow his place to be disinfected, and the case was adjourned till Friday.

The Chairman, the Rev. E. J. Beck: If ever a man was a murderer, I think that man is. I think any penalty that can be inflicted on him would be light.

Mr. Bulmer: He has caused the death of several people.

The Chairman: And murdered his own wife.

The Clerk explained that proceedings might be taken against the man for transmitting clothing which had been exposed to infection, the penalty for which was £5. This was the course recommended by the Local Government Board.

Mr. Stevens: Escott is a very respectable man, well-known in the parish.

The Chairman: All the more blame to him if he is.

Mr. Stevens: He is a highly respectable man, and has been in the parish for years.

The Chairman: I do not say he is not a respectable man; but he deserves to be punished. (Hear, hear.)

Mr. Stevens said he was sorry the man did not vaccinate. He had, however, already lost his wife and children, and he thought mercy should be shown to him, and that he should not be prosecuted. There were others who held the same opinions as Escott.

The Chairman: I wonder that you should speak of generosity to a man who has been guilty of what I call a great crime. I think justice requires that if we have the power to stop such exceedingly wicked practices, we should do it. If there be a mischievous, I had almost said a murderous practice, it is that of these anti-vaccinators, who are a source of peril to the whole neighbourhood. This man actually had a shop, and kept it open till it came to the knowledge of the Medical Officer of Health. Our Medical Officer was his legal adviser, and entreated him for months to have himself and those near him vaccinated. He would not, and he has brought upon himself the natural and inevitable consequence of his own imprudence and folly. But he has done a good deal worse; he has been the means of spreading the infection to a whole neighbourhood. I do not see any room for mercy or generosity. (Hear.) It seems to me a case where we should act with the utmost strictness. It is not for us to deal with the man and fine him, but for the magistrate; but it is the duty of the parish to act in accordance with the recommendation given us.

Mr. Williams: Wouldn't you summon the man who lent the clothes?

The Chairman: He died in consequence of what was done; there was little mercy shown to him.

Mr. Bulmer: Let the magistrate decide the question; that is the best way.

Mr. Foottit moved that the matter be referred to the Sanitary Committee, and Mr. Williams seconded.

The Chairman: I am glad that it is proposed not to decide the matter to-night, for perhaps on another occasion we may consider it with a little more dispassionateness. I confess that I myself feel very strongly. I cannot bear to hear of a man communicating such a disease and killing a neighbour.

The motion was agreed to.

In the Police Court.

With Escott's case before the bench, we need not detain our readers. Stipendiary magistrates have their individual defects, but they are accustomed to hear both sides, and to suspect *ex parte* statements, and do not recklessly let fly charges of murder and shriek for vengeance like Parson Beck. Having heard the charge against Escott, the magistrate dismissed the summons. It was clearly shown that he had taken every precaution to avert infection in his power, and that his prosecution, heartless as it was, had its origin in some wretched parochial jealousy.

Where Escott Lived.

Southwark-park-road, formerly known as Jamaica Level, runs between Rotherhithe and Bermondsey, Escott's house being on the Rotherhithe side of the way. It is a noisome neighbourhood. Adjacent are the arches of the South-Eastern Railway, some of which are let to manure manufacturers, one of whom operates on stale fish, the stench from which is sometimes overpowering. Close to Escott's shop is Raymouth-road, the gardens of which abut on the railway arches, where the residents complain bitterly of the neglect of their dust-bins, which are not emptied for months, applications to the parish officials meeting with no attention. In short, the corner of Rotherhithe under attention is a pestilential quarter, just where small-pox and other fevers might be expected to prevail.

And there, during the now-expiring London epidemic, small-pox has prevailed. A reader of Dr. Johnston's letter would suppose that the outbreak he describes was something sudden, springing *ab ovo* from Escott's family. Nothing could be more untrue—more dastardly and maliciously untrue. As early as Christmas there were cases of small-pox in the neighbourhood, and as the season advanced they multiplied, so that, as reported, there was scarcely a house in Raymouth-road exempt from the disease. The victims were chiefly among the young; in one family two girls, of 12 and 15, and a lad of 17 perished, all vaccinated. In February a workman of Escott's, who lodged close by in Southwark-park-road, was stricken down. Not until they had lived in the midst of the epidemic for full six months were the Escotts attacked.

The Course of the Disease in the Escott Household.

It was in the early part of June that John Escott, aged fourteen, sickened. He had not been vaccinated; no medical assistance was called in; he was nursed by his mother; and he recovered.

Mrs. Escott, aged 48, became seriously unwell

on July 7; Mr. Freston was called in on the 9th; she died on the 12th, and was buried on the 15th. She had been vaccinated in childhood; no eruption was visible on her person, and the cause of death was certified by Freston as "enteric fever six days, and diarrhœa two days." The subsequent assertion that she died of suppressed small-pox is not worth refutation. She was not only of a feeble constitution, but was at a critical period of life, and was much exhausted with watching and nursing at home and among her neighbours.

Percy Escott, aged 4, sickened on July 13, and died on the 21st. Was not vaccinated. Certificate of death: "Small-pox."

Ellen Escott, aged 11, sickened with small-pox on July 16. Was not vaccinated, and recovered.

Charles William Escott, aged 17, sickened on July 19, and died on the 27th. Was not vaccinated. Certificate of death: "Small-pox."

Walter, aged 9, and Frederick Escott, aged 7, also fell sick about the 19th. They were not vaccinated, and both recovered.

Two daughters, aged 19 and 22, were vaccinated in infancy, and neither took the disease.

Such is the record of the Escott family. There were six cases of small-pox, all unvaccinated—two deaths and four recoveries. It is by no means an uncommon record, and we do not pretend to draw any conclusions from it either for or against vaccination. The question is not to be argued from such narrow and uncertain premisses. It would be easy to assert that under worse circumstances the whole family might have been swept away; or, that under better treatment none need have died; and so on and on. It might also be pointed out that the two daughters who were vaccinated in infancy escaped unscathed; but the answer is, that had they been attacked, and had we said: See the uselessness of vaccination! we should instantly hear that vaccination in childhood is of little or no account after girlhood, and that these young women, not being re-vaccinated, had no advantage over their unvaccinated sister and six brothers; and that it is disingenuous to try to discredit vaccination by the imputation of a claim that is now frankly disallowed.

What Happened Afterwards.

Mr. Browning, medical officer, and Mr. Edwards, sanitary officer for Rotherhithe, visited Escott's house on July 25, and on the 26th a magistrate's order was obtained for the removal of the four children suffering from the disease, on the ground of insufficient accommodation, and that the patients were being waited upon by three unvaccinated persons. To the execution of this order Mr. Escott opposed a firm resistance, in which he was sustained by his medical attendant, Mr. Freston, who held that to remove the children would imperil their lives, whilst the accommodation was ample. The patients occupied the two upper rooms in a three-storey house, devoted exclusively to their use; their attendants were vaccinated, and none of them were allowed to enter the shop, although the contrary was untruly alleged.

On Aug. 17, Mr. Freston called in Dr. Johnston, to certify to the condition of the children, with a view to their removal to a convalescent home. Dr. Johnston suggested that they should first go to the hospital for a few days, to which their father did not object, and, accordingly, they were taken away upon the following day, Aug. 18. Immediately afterwards Mr. Escott burnt the bedding, and applied to the sanitary officer of Bermondsey to have his house disinfected, and a man who has attended to these jobs for five years past was directed to do whatever was requisite. By him disinfection was completed to the perfect satisfaction of Mr. Freston.

Now, mark the ridiculous rivalries of these parish officers. Escott's home is in Rotherhithe, but he had gone over the way, and called in the Bermondsey officer to attend to the disinfection, whereon the Rotherhithe officer went to Greenwich, and took out a summons against Escott for neglecting to have his house disinfected! The magistrate heard the charge carefully, envenomed as it was by Dr. Johnston's scandalous letter, and in the end pronounced Escott blameless of any negligence whatever, and dismissed the summons. The sanitary officer, unabashed, asked to have at least the cost of the summons, which was promptly refused. To prefer a false accusation, and then to claim to have the price of the accusation from the accused, was something in excess of impudence.

The Story of the Coat.

Having thus disposed, in the simplest terms, of the allegations advanced against Mr. Escott, there still remain that of the borrowed coat, with the consequent death of the man from whom the coat was borrowed, and the sixteen cases of small-pox said to be derived from the outbreak in the Escott family.

The summary answer to the coat story is, that Escott never borrowed a coat; but the lie, delivered with such circumstance, has a distant relation with matter of fact. Charles Escott, a fine young fellow of seventeen, had a companion who lodged over an oil-shop, on the opposite side of the road; and as he was preparing to attend his mother's funeral, his friend urged him to wear his black clothes, which were better than his own. Escott declined, but being persuaded to try them on, they fitted so nicely and looked so well, that he consented to wear them on the occasion. The clothes were not in use for more than two or three hours, and were returned as soon as done with. Mrs. Escott was buried on July 15, and not until the 19th did young Escott become unwell, and not until Aug. 8—three weeks and three days after the funeral—did his companion fall ill. Whatever truth there may be in the doctrine of the communication of disease by germs, we ask, how was it possible for Escott to convey them to his friend's garments before they had ripened on himself? But we have no call to contest an assertion that is without a vestige of authority. If small-pox be as catching as commonly supposed, there were scores of ways in which, in his situation, the youth was open to attack. Poor fellow! his death was probably due to the treatment to which he was subjected. His landlady declined to nurse him, and he was taken from his warm bed at night, when

the pox were breaking out upon him, dressed, and walked to an ambulance, placed several hundred yards off, so as not to excite observation, and conveyed to the hospital. His friends were presently informed that his case was desperate, and on the eighth day he died.

The Sixteen Cases of Small-Pox.

That sixteen cases of small-pox sprang from the outbreak in the Escott family is simply a piece of fiction, and most malicious fiction. It is part of the pretence, so artfully conveyed to the public, that the epidemic in Rotherhithe originated in July among Escott's unvaccinated children, when, in fact, the neighbourhood was infected from Christmas onwards, and not until the epidemic was abating, and the stench from the manure-works in the tropical heat of July was peculiarly offensive, were the Escotts attacked. It may be true that there were sixteen cases in the district subsequently, but why, in the name of reason, should they be specially affiliated to the Escotts? No family around ever even pretended to have contracted the disease from them, and if Dr. Johnston has any authority for his statement outside his active imagination, let him produce it and have it verified.

Conduct of the Newspapers.

Newspapers are supposed to lead public opinion, but it is more correct to say that, with greater or less success, their conductors seek to discover and express and pander to it; and so far from attempting independent instruction or advice, they shrink from the expression of any opinion they consider likely to offend the mass of their subscribers. Now vaccination happens to be in favour with the educated and semi-educated mob, and consequently whatever is supposed to tend to the credit of the practice is diligently published, whilst whatever tends to its discredit is as diligently suppressed. Of the method of suppression pursued, we might adduce many instances (some so outrageously unjust as to be well-nigh incredible) sufficient to dissipate the agreeable illusion that truth is sure of a hearing in any respectable English journal. A story like that of Escott, therefore, as concocted by Dr. Johnston and endorsed by the Local Government Board, was sure of eager acceptance, and has been published everywhere, and commented upon as a relation of so much indisputable matter of fact. We must limit ourselves to a few citations as representative of many in proof of what cock-and-bull rubbish can be gravely reproduced as sound gospel and homily.

Daily News, Sept. 8.

Possibly the bitterest opponents of vaccination may be impressed by the grim details of the story which was told and discussed by the Rotherhithe Vestry on Tuesday. A person in the locality had made himself conspicuous for many years as a vehement anti-vaccinator, and had ingeniously succeeded in evading the Act, so that no members of his family were vaccinated. A couple of months back one of this man's children took small-pox. No doctor was called in, but the child was nursed by its mother, and recovered. Then the mother herself took small-pox and died, after which two more of the children fell victims to the disease, and three more had to be taken to the hospital. Bad though this was, there was more to come, if the story told at the Vestry is true. The anti-vaccinationist borrowed from a neighbour a suit of black clothes to wear at his wife's funeral. He kept the clothes in his house a few days before returning them. Shortly after their return their owner also took the small-pox, was conveyed to the hospital, and died there. Since then several houses in the same neighbourhood have become infected, and some sixteen cases of small-pox have been taken to the hosptal. Commentary on such cases is needless. The liberty of the individual is sacred so long as it does not infringe upon the liberty of someone else. If anti-vaccinationists only did harm to themselves, no one would have a right to interfere with their fancies; but when their vagaries may lead to the wholesale infection of a district, and the deaths of several persons, it is time that the laws which aim at preventing the spread of contagion should be thoroughly put into force.

British Medical Journal, Sept. 17.

The wickedness of encouraging the anti-vaccination agitation could not, it is opportunely pointed out by the *Globe*, be more strikingly proved than by an account it printed of the origin of an outbreak of small-pox in Rotherhithe. "A leading anti-vaccinator," Escott by name, who had had none of his children vaccinated, has lost his wife and two children by small-pox, and four others have had the disease. Escott borrowed a suit of mourning from a friend named Angus to attend his wife's funeral, and returned the clothes without disinfection, with the result that the lender caught small-pox, and died. Since then, nearly every house in the neighbourhood has been attacked, and sixteen patients have been removed to hospital.

Manchester Courier, Sept. 9.

The late Thomas Hood once made a remark to the effect that "evil is wrought by want of thought more than by want of heart." If he had said instead that evil is wrought by conceit, obstinacy, and ignorance, more than by aught else, he would have been nearer the truth. The amount of mischief done by these qualities is simply incredible, and never is the fact so conspicuously illustrated as in the proceedings of the anti-vaccinators. These people are, with scarcely an exception, the most ignorant of the ignorant. They have secured the support of one or two medical practitioners of the second order, and they have succeeded in proving in certain out-of-the-way places that they possess a certain amount of political influence, the result of which was that that great statesman, Mr. Dodson, made an effort to conciliate them by relaxing the strictness of the Vaccination Acts as soon as he came into office. It happened, however, that the attempt of the Liberal Government in this direction was contemporaneous with the outbreak of a fresh epidemic of small-pox, and Mr. Dodson consequently dropped his measure with as much precipitancy as he had taken it up, and by so doing saved the country to a certain extent from the evils which would be certainly entailed upon it were vaccination made any less compulsory than it is at the present moment.

Then repeating the Escott fable, the *Courier* proceeds:—

Over sixteen cases from the immediate neighbourhood of this man's house are now in hospital, and by way of putting the top stone to his criminal folly,

he has obstinately refused to allow his house to be disinfected, and has allowed himself to be summoned before the police-magistrate, who seems, with singularly ill-judged leniency, to have adjourned the case. At the meeting of the Rotherhithe Guardians some rather strong language was used, the Chairman stigmatising Mr. Escott with some harshness as a "murderer." Few people will be disposed to go quite so far, seeing that the man had obviously no intention of killing his wife and children, or even of inflicting the death penalty on his neighbour. That he has succeeded in causing the loss of four lives and in creating a very large amount of sickness in the neighbourhood in which he lives is, however, indisputable, and his own reflections on those facts can hardly be of a very pleasurable description—unless, indeed, he be, as too many of his class unfortunately are, too impenetrably hide-bound in conceit and ignorance to appreciate the mischief which he has done. The real culprits in a case like this are not so much the poor simpletons whose names come to the front, but the men who make their living by propagating error, and who, in defiance of light and leading, set up their own crude theories in opposition to all the teachings of experience, and to the all but universal consent of the scientific world.

Leeds Mercury, Sept. 10.

William Escott is an anti-vaccinator, of whom it may at least be said that he has the courage of his convictions. He had, it appears, succeeded in evading the provisions of the Vaccination Act, and about two months ago one of his children was attacked with small-pox. The disease became epidemic, and every house in Escott's immediate neighbourhood was infected, and as many as sixteen cases had to be removed to the hospital. Truly Escott showed his contempt alike for small-pox and for doctors, and as he has himself lived through the epidemic which has desolated his home, he may probably hold himself forth as a burning and shining light in the good cause. He is said to be a highly respectable man, who has been in the parish for years, and we shall no doubt be justified in assuming that he is as honest in regard to his convictions as he is respectable in his social relations. Unfortunately, however, neither moral honesty nor social respectability acts as a safeguard against mischievous and erroneous practices. His very honesty, in fact, has become almost a crime. It is not necessary to accept the opinion pronounced by the Chairman of the Rotherhithe Vestry, that if ever a man was a murderer, Escott is one. We need not go quite so far as that; but we cannot shut our eyes to the fact that his conduct directly led to the death of his wife and two of his children, and to the infection of the district in which he lived, by a foul and malignant disease. Such a man, notwithstanding his sincerity, could scarcely claim the sympathy of the public if he should have to pay for his obstinacy by penalties other than those he has already brought upon himself.

Dr. Underhill once spoke of "the infinite lying of the newspapers"; and in these specimens we see how falsehood once set a-going is parrot-like squawked through the whole newspaper forest. The worst of it is that there is no redress for untruth in the sacred cause of vaccination. The *Daily News*, for example, would not on any terms retract the calumny heaped upon Escott. "Shameful!" exclaims a reader. It is shameful; but so it is and so it will be. Newspapers are not prophets of righteousness which testify to their generation like the spirit in Ezekiel "whether they will hear, or whether they will forbear," but are dependent for their existence and prosperity on the goodwill of their readers, and their conductors judiciously withhold whatever seems likely to endanger that goodwill. For the present vaccination is in the ascendant, but as soon as the wind of public opinion veers, the change will be manifest in the Press, and the very editors who are traducing men like Escott, will then smother them in adulation as confessors of good sense in a stupid and superstitious community.

WILLIAM ESCOTT.

Finally, let us express our cordial sympathy with Mr. Escott in the severe domestic affliction that has befallen him, and the merciless annoyance and obloquy to which he has been subjected. In every contest for truth and right a few have to suffer for many; and when the struggle is over, we say, "Blessed were the Martyrs!" Nevertheless, martyrdom, however glorious in retrospect, is far from agreeable in transaction, and few there be who are equal to the strain; but even the feeble may try to recognise present-day martyrs, and to soften for them the stress of affliction and strife. One had need to have clear convictions to pass through the ordeal to which Mr. Escott has been subjected; but with truth for one's companion, much may be borne:—

"For saved by *that* divine alliance,
From terrors of defeat;
Unvauntingly, yet with defiance,
One man the world may meet."

VACCINATORS AT RYDE.

OUR British Sangrados are "too-too" funny. Le Sage could not have ventured to create such inconsistency.

At the late Congress of the British Medical Association, Dr. Martin, of the United States, was the great vaccination gun; his experience and authority were brought forward as the sufficient reason why all should bow before him.

Well, Dr. Martin repudiated the use of any but what they are just now pleased to call *calf* lymph. He stated that he had utterly abandoned the use of the humanised virus, and that he had done so by a "natural and perfectly logical process of deductive reasoning," because, "while he propagated humanised virus," he was repeatedly annoyed by receiving complaints of erysipelas from physicians to whom he issued it.

He further characterised humanised lymph as "an abomination." This is the variolized lymph which for seventy years has been used in thousands upon thousands of cases, and what then? Why the meeting unanimously passed a resolution declaring their "full confidence in the present supply of lymph," while expressing a hope that the Government would organise a supply of calf lymph for public vaccinators! Do these gentlemen think there is no limit to public gullibility?

P. A. TAYLOR.

Brighton, *Sept.* 25.

AN ANTI-VACCINATOR ON M. PASTEUR.

[To the Editor of the *Pall Mall Gazette.*]

SIR,—After describing some of M. Pasteur's experiments in inoculation, you ask, What has the anti-vaccinator to say? Perhaps you will allow an anti-vaccinator to answer, although in the metropolitan press he has about as much chance of an audience as a Nihilist or Land Leaguer.

M. Pasteur's experiments affect anti-vaccinators not at all. They are explicable by the well-known rule that when the blood is possessed by one sort of fever it is not open to another. If you have scarlet-fever, you are not likely to contract small-pox, nor *vice versâ*, and hence, as physicians know, it is safe to treat diverse fevers in the same hospital. When vaccination was introduced, it was commended to public faith by what was called the variolous test. A person was inoculated with cow-pox, and subsequently with small-pox, and as the small-pox did not "take," it was said, "Behold a constitution rendered proof against small-pox." But it was found after a sufficient interval that the cow-poxed could be inoculated with small-pox, and not only inoculated, but could catch small-pox like their unvaccinated acquaintance. The prevalent demand for re-vaccination at this day is an open confession that the influence of vaccination is transient, and not permanent, as Jenner asserted.

Hence it is no matter of surprise to an anti-vaccinator that if M. Pasteur inoculates an animal with a certain zymotic affection, it should be proof for a time against that affection. But zymotic diseases are many, and is it seriously contemplated to inoculate men and animals with them in series, and to maintain their efficacy by periodical re-inoculations? If practicable, what a price it would be to pay for health! On the contrary, says the anti-vaccinator, the best defence of health in men and animals is health, and to ascertain the conditions of health, and to maintain them, is a far more rational procedure than to resort to questionable inoculations, with many and terrible attendant hazards. Mr. Edwin Chadwick says the healthiest place in this country is Perth Penitentiary, where by cleanliness, fresh air, and good water, all forms of zymotic disease are deprived of the possibility of existence. It seems to an anti-vaccinator that what is effected not only at Perth, but in all well-conducted jails, is also practicable outside prison walls, and that there is a far wider blessing involved in the discovery and observance of the common laws of health, than in seeking for artificial security (usually illusory) from singular afflictions like small-pox or hydrophobia. ST. KENTIGERN.

A part of this letter appeared in the *Pall Mall Gazette* of Sept. 3, with these remarks:—

"After describing some of M. Pasteur's recent experiments in inoculation, we asked, in an unlucky moment, 'What has the anti-vaccinator to say?' forgetting that of all men the anti-vaccinator is never weary of saying his say, whenever and wherever an opportunity is offered him. Such an opportunity having unwarily been afforded, we need not say we have received much lengthier contributions from anti-vaccinators than we have space to insert; but, as the question was asked, we give the gist of the first reply we received—premising that it will also be the last we shall publish."

We are not sorry to hear that the anti-vaccinator is so active and irrepressible. It requires courage and pertinacity to cope with the monstrous imposture with which he is everywhere confronted.

ALL VACCINATED IN THE BROMLEY HOSPITAL.

MR. FRASER NICOLSON, L.R.C.P. Edin., gives an account in the *Lancet* of Aug. 27 of a recent epidemic of small-pox in the Bromley Union, Middlesex. It was supposed to have originated in a paper factory, where a bale of filthy rags from Italy had been unpacked and assorted. Forty-three cases were received into the hospital, and treated by Mr. Nicolson between April 25 and June 29, sixteen of which he describes as confluent, fourteen as discrete, and thirteen as modified. Of the confluent, two died; all the others recovered. Two-thirds of the patients were young people between the ages of ten and twenty, and *all were vaccinated—three being re-vaccinated.* Mr. Nicolson congratulates himself upon his successful treatment, especially of so many confluent cases, wisely saying nothing of the benefits of vaccination, but reserving his praise for the site of the hospital and the weather:—

"The chief element of success lay, I believe, in the high open bracing locality in which the temporary hospital was placed, together with the fortunate occurrence of cool dry winds during the time that the worst cases were in hospital. Those who have remarked the difference in spirits and stamina of patients under these circumstances, as contrasted with the condition of sufferers from the disease in warm, muggy weather, will understand how much there was to be thankful for in these atmospheric influences."

THE DUTY OF MAGISTRATES.—Our respected Vice-President, Mr. George Tatham, the Mayor of Leeds, has been censured for sitting on the Bench and suffering an anti-vaccinator to be fined; but the question is, What other course could he pursue? In a letter to Mr. Young the Mayor observes:—"A magistrate has been commended for refusing to act rather than administer the law, the soundness of which course appears to me questionable, inasmuch as magistrates have a large discretion, and can administer the law either leniently or severely. For myself, I would rather be tried before a sympathising judge than before an adverse one. The facts were these: F. W. Smith was summoned, and my brother magistrates asked if I preferred not to sit, but I thought it best to do so. I watched the case, taking care to give the defendant every advantage the law would allow, and when the offence (?) was proved I proposed that a nominal penalty should be imposed, but my intercession was of no avail. The offence was so heinous in the eyes of my colleagues that nothing short of the full penalty would satisfy them; and, there being two against one, I was powerless. I stated, however, from the bench that I was sorry to have to impose a fine, and that I thought the law ought to be altered."

EXCRUCIATING FERVOUR.

WHAT delirious rubbish is published in favour of vaccination! The *Evening Standard* of Sept. 22, commenting on the Brighton Conference, observes:—

"The lessons of the recent visitation of small-pox have not passed unnoticed. Although the British public may be slow to appreciate argument, the logic which comes home most readily is the stern logic of facts, and it is useless for a few fanatics to stand raving at vaccination when the small-pox is seen to be singling out the unvaccinated and carrying them off by the hundred, while class after class of people known to be vaccinated and re-vaccinated move about in the very heart of the infected districts, and are never touched. Add to this that every single case of alleged damage by vaccination has been at once investigated, with the result of showing that stories are trumped up to support the work of agitation, obviously because no true stories can be found."

Even Mr. Ernest Hart himself would say, like the æsthetic lady in *Punch*, "That is too, TOO, TOO!"

VACCINATED AND NON-VACCINATED.

DR. GARTH WILKINSON, in a letter to the *Eastern Daily Press*, of Sept. 2, observes:—

Figures proving the high death rate of the unvaccinated, and the low death rate of the vaccinated, can always be reproduced in every hospital return of the kind. They are partly, but not wholly true. But the inference drawn from them is fallacious.

Your correspondent says—"One in every fifty dies after vaccination, but fifty out of every hundred—one of two—die when there has been no vaccination."

The true meaning of this is, that the unvaccinated belong to a totally different class and condition from the vaccinated; that they are at the bottom of society, both as to health, morals, and all circumstances. That they are the chosen prey of every disease as well as small-pox; the main food of all epidemic mortality. Every murrain is theirs by preference. To put them into statistics with the other classes is to abuse figures by putting incommensurates together.

The way to sound this part of the Vaccination Question is to canvass the separate case of each unvaccinated death, and see what elements there were in it which gave it over to mortality. Leave vaccination aside as a factor until this is done.

But it is demonstrable that vaccination has no influence whatever over the small-pox death rate. For the whole hospital death rate now of vaccinated and unvaccinated is just about 18 per cent.; almost exactly what it was before vaccination existed. The tables of Jurin in last century, and of Marson now, attest this. There is, then, no difference in the hospital mortality of small-pox since vaccination. The difference is, that vaccination has sorted the deaths into two classes, and that the unvaccinated are from the necessity of the case, the rotten sheep of health, rotten before they were sorted, and afterwards. A thousand other factors, which cannot be causal, would, as *sorters*, produce the same effect as non-vaccination. Thus, the people who wear best black and employ fashionable tailors die of small-pox at a vastly less rate than those who wear fustian, and these again, than those who are in rags. The drinkers of the best port die less in the case than the drinkers of the cheapest beer. Any circumstance that shows condition and social quality, as vaccination also does, is attended with a smaller death rate from zymotic diseases; anything that demonstrates weak persons and sordid surroundings, which non-vaccination does, is attended with a greater death rate. But the sifting process produced by a thousand circumstances is no consequence. For put the two heaps of deaths together, and they come to just the same figure now as before vaccination existed.

The statist plays with figures, where figures cannot be the first question, nor enter into the case before each fact that forms the figures is separately examined, and its qualifications ascer- to see whether it votes for vaccination or for sanitary conditions.

AN AMERICAN JOB.—Efforts are being made in the United States to obtain an enactment for the compulsory vaccination of all immigrants—a rare medical job! The majority of immigrants are Germans, who are nearly all vaccinated and re-vaccinated, and well-vaccinated Irish and Scandinavians; and yet the rogues concerned in the project pretend that the immigrants come from countries where there "is an intense prejudice against vaccination!"

ANDOVER.—At Andover, in Hampshire, there are a number of anti-vaccinators, and a raid has been made upon them, two or three at a time being summoned, so as to avoid overmuch excitement. Mr. Philip Ponting, in the course of his defence, observed that he fully understood that the justices did not make the laws, but only administered them. Ponting blood, however, was very peculiar blood, and he had a relative who was vaccinated, and the result of the operation was that she lost her nose, and had to go about for twenty years without one. He had, moreover, reason to believe that there was a deal of bad vaccine about, although he didn't suppose there was any good, and as the doctors would not guarantee that his boy would not be blood-poisoned by vaccination, he objected to it altogether. He was not so fortunate as some people, for he only had one boy, so he took a great pride in that one. Fined 2s. 6d. and 8s. costs.

A WANTON INQUEST.—Coroners decline to hold inquests on children killed by vaccination, but are ready enough to hold them on children who die of small-pox unvaccinated. Such an inquest has been held at Dalston on the child of Mr. Hugh Mullin, there being no pretext whatever for the inquest, outside the fact of non-vaccination, the cause of death being duly certified by a medical man. There was an extraordinary fuss made over the case in the local newspapers, as if vaccinated children did not die every day of small-pox without exciting any observation. It is worthy of notice that the coroner exempted the jury from "viewing the body" from fear of infection, and the question is whether an inquest is lawfully fulfilled where the body is not viewed. The poor father was much harassed with threats, private and official, for his perverse disbelief in vaccine salvation, and it required some assurance to satisfy him that he had committed no offence whatever of which the law had cognisance.

MR. J. F. BOTTOMLEY FIRTH, M.P.

MR. J. MITCHELL, of Shepherd's Bush, as one of Mr. Firth's Chelsea constituents, having written to him to support Mr. P. A. Taylor's resolution for the repeal of the Compulsory Vaccination Acts, received the following reply :—

"House of Commons Library,
"August 23, 1881.

DEAR SIR,—Until I see Mr. Taylor's resolution, I cannot be sure as to supporting it. My own impression is that vaccination is often productive of good, and that it saved my own life; but I think that where parents show their care for their children's health to the extent of suffering penalties rather than have them vaccinated, it is not right to inflict cumulative penalties. I think, also, that we ought to have further guarantees as to purity of the lymph used.

"Yours faithfully, J. F. B. FIRTH."

Further guarantees! What are the existing guarantees? and how is it possible to guarantee the specific character of an organic poison? Mr. Firth writes thoughtlessly, repeating current cant that is a mere evasion of manifest difficulties. In the same way, he recommends Persecution, Limited. Parents who dread and detest the quackery of vaccination are to be fined once, and, if steadfast in their resistance to the imposture, are to be let alone in future. Mr. Firth is, we believe, a member of the Society of Friends, and we may take him as an example of its decadence from its ancient standard of righteousness. Imagine an old-fashioned Quaker being let off from an oath on payment of a guinea and costs! Or exempted from attendance at the steeple-house on similar terms! Such analogies, however, fall short of the outrage inflicted by the attempt to enforce vaccination. Parents who *know* that vaccination does not save from small-pox, and who *know* that it is attended with injury and peril, are to suppress their *science*, or be fined. It is not only conscience that is submitted to indignity by such procedure, for conscience may be sincere whilst whimsical and unwise. It is science itself (science informed by conscience) that is oppressed by medical ignorance and intolerance.

RECEIPT FOR A MEDICAL LECTURE.—Write in magisterial English an essay without any meaning in particular or in general. Take three nouns in each line and convert them with the aid of a dictionary into compounds of Greek and Latin, and say at the end you have *proved your point*; that opponents have already given way; and that your views are victorious all along the line. Better not say what the point is that is proved, or define your own opinion.

HORSE-POX REVIVED.—Mr. Joseph Hands, says the *Lancet*, "who sixty years ago was a pupil of Dr. Jenner, has issued a pamphlet in which he revives the seeming paradox that cow-pox is not in fact cow-pox, but horse-pox, transmitted to, and cultivated on, the bovine race, and that it is time we sought to renew our stocks of vaccine lymph from the original sources—that is, from the horse, and that the protectiveness against small-pox is of a much higher and more persistent character when the lymph from horse-pox is used than from cow-pox."—Mr. Hands, as a Jennerian, is perfectly right in his contention. Jenner was an inveterate shuffler, but if we may fix him to anything, it is to horse-pox, or, rather, horse-grease, and to horse-grease cow-pox.

AN AWKWARD CASE.

IN Dr. C. E. Prior's report to the Bedford Town Council occurs this passage :—

"Sept. 5, 1881.—On visiting the Small-Pox Hospital to day, I find the three patients convalescent, but the custodian has unfortunately taken the disease, and he is now domiciled in the Hospital."

Was this custodian re-vaccinated? If so, why did he catch small-pox? If not re-vaccinated, why was he not? Does Dr. Prior distrust the infallible security afforded by re-vaccination? An answer will oblige.

RIVAL POX MERCHANTS.—There is an instructive quarrel raging in New England between rival vendors of "pure lymph from the calf," and it is asserted that "bogus virus," and virus that is nothing but a mixture of indescribable abominations are imposed upon the profession. Doctor H. A. Martin, of Boston, presumes to have a monopoly of the genuine corruption, but he is told that "he cannot claim any exclusive right to propagate virus," and that "he, too, advertises and sells animal scabs or crusts, which are the débris of broken-down cells, hair, dried pus, as well as lymph, and, if not carefully attended to, more or less dung and urea."——We should not object to a similar row and exposure in Old England.

PROFITS OF A SCARE.—Mr. Emerton, of Boston, writes :—"A short time ago bills were posted over the town stating that small-pox had broken out at some works in the neighbourhood, and calling upon the inhabitants to protect themselves by vaccination. It is now denied that small-pox ever existed at the place designated, but the purpose of the vaccinators was served. Numbers flocked to them to receive protection, and the guardians ordered the inhabitants of the union to be vaccinated. Thus scores of pounds passed into the pockets of the medical fraternity, and all by means of an idle scare! I wish the London Society would initiate a house-to-house canvass throughout the kingdom in order to petition Parliament to repeal the Compulsory Vaccination Act. I am convinced that nine out of ten of the working classes would sign for repeal."

DISCUSSION IN NEWSPAPERS.—It is only want of space that prevents our making a number of extracts from several courses of correspondence that have recently appeared. In the *Newcastle Chronicle*, Mr. Alex. Wheeler and other friends have conducted a discussion with Dr. Buchanan's Memorandum for *pièce de résistance*, which has been as a sort of education in the vaccination question. In the *Kensington News*, a long debate has been carried on, in which Mr. H. D. Dudgeon's research, wisdom, and wit have shone conspicuous, and he has been ably supported by Mr. W. J. Collins, Mr. Tebb, Mr. Baker, Mr. Young and others. A most effective controversy has also appeared in the *Bermondsey and Rotherhithe Advertiser*, the combatants being Dr. Shaw and Mr. B. Reeve, the Doctor showing himself as ill-informed as ill-mannered, and Mr. Reeve ready with facts, cogent and courteous. In one respect, the exclusion of anti-vaccinators from discussion in the press is justified by experience—they play havoc with their adversaries, who, neither in facts, logic, or temper stand before them. Those who are concerned for the credit of vaccination do well to shield it from such dangerous assailants.

PASTEUR'S DISCOVERY.

(From *La Semaine Française*, Sept. 17, 1881.)

THE Conseil-Général of Seine-et-Marne has been busying itself in its last sittings with M. Pasteur's experiments at Pouilly-le-Fort on the vaccination of cattle. This is a question of high agricultural importance, especially in the department of Seine-et-Marne, where the *charbon* causes a loss of some ten thousand pounds annually. The prefect announced that in consequence of the complaints of veterinarians of the difficulty of procuring M. Pasteur's charbon-vaccine, he had written to that gentlemen and reccived the following reply:—

"M. Prefect,—I was at London when you called to intimate your intention to ask the council to vote a sum for the establishment of a small vaccine manufactory. I think the idea premature. Many points of detail are still unsettled, which at the present moment I alone can determine. For instance, all the vaccine I have sent out for the last month has been fresh. . . . . However, you need not fear lest there be a dearth of the precious liquid next year. The disease will be hardly felt in the winter, and I am preparing for the manufacture on a large scale. In the spring I hope to have vaccine for a million animals. An intelligent female in my laboratory will have no other occupation the year round but the preparation of the vaccine. She will be assisted by a workman. I shall open a shop for the sale of tubes, and shall supply them to veterinarians at or about cost price—say a halfpenny for each beast. For the first year I shall be occupied in establishing a system of verifying the lymph, and insuring the permanence of its preservative virtues. I shall then turn my attention to the provinces, and make a similar establishment. When I have proved its working I shall be glad to aid you in carrying out your project. I have the satisfaction of informing you that the number of sheep already vaccinated approaches 30,000, besides some hundreds of cows, calves, and horses.—Yours, &c., PASTEUR."

Was not this discovery prophesied in Mr. Pickering's *Anti-Vaccinator*, January, 1873?—

Had I and mine consulted been
In grand Creation's opening scene—
Earth's chemistry I would reform,
And epidemic germs disarm;
The dungheap at the cottage door
Should do no evil to the poor,
But be a joy for evermore.
The well that soaks from dunghill-drain
Should breed no ailings, cause no pain.
The child of earth by muck surrounded,
Should be at cleanliness astounded;
And learn to live like pig in sty,
Nor from miasma droop or die.

A PIOUS WISH.

61, Bunhill-row, E.C.,
Sept. 21, 1881.

SIR,—Your post-card to hand, for which many thanks. Don't trouble yourself to send any more to people who understand the matter. All the good I wish the Society is that every member may die of small-pox within six months. I would not vaccinate one of them on any account.—Yours truly, W. A. DINGLE, L.R.C.P. Lond.

To Mr. W. YOUNG, Secretary,
London Society for the Abolition of
Compulsory Vaccination.

SHUT OUT THAT LIGHT!

1, Rockstone-terrace, Southampton.
Aug. 20, 1881.

To the Proprietors of the VACCINATION INQUIRER.

A COPY of a publication with the above title has been sent to me to the Royal Victoria Hospital, which I return, and request not to be troubled with another. W. C. MACLEAN, Surgeon-General,
Professor of Military Medicine, Army
Medical School.

ANTI-VACCINATION IN NEW ZEALAND. — Mr. Thomas Hewetson, of Upper Moutere, in a letter of July 9 to Mr. Tebb, says that he has three unvaccinated children (born in the colony) the pictures of health, and, as far as he can judge, of beauty also. He has circulated anti-vaccination literature in his own neighbourhood, and also in Nelson, where he hears it is read with interest.—We shall be glad to receive any statistics relating to small-pox from our colonial readers, with copies of vaccination ordinances.

W. EASBY, M.D., of March, Cambridgeshire, is pleased to say, in the *Newcastle Chronicle*, that he has read through a number of the VACCINATION INQUIRER, and that "the strong point in it is abuse"; that "space will not allow me to quote all the extracts I should wish, but they amount to this—Vaccinators are fools, liars, &c., whilst anti-vaccinators are sensible, clever men."—Dr. Easby relates a variety of vaccination miracles, but if we may measure his veracity by his criticism of the INQUIRER, we should be justified in treating them as of little account.

BORN WITH SMALL-POX.—In the Report of the Registrar-General for the week ending Sept. 10, we read:—"The fatal case of an infant aged one week in the Deptford Small-pox Hospital was certified as vaccinated, but in this case the child must have been born with the disease, and was therefore vaccinated while suffering from small-pox."—Here we have an instance of the working of the new regulations for baby vaccination. We are not far from the German proposal mentioned by Dr. Oidtmann, to vaccinate *before* birth. The doctors could easily make it fashionable and "scientific."

INTERNATIONAL CONGRESS, COLOGNE.

WE have received the programme of the International Congress which will assemble at Cologne on Sunday, October 9, and hold a series of meetings on the 10th, 11th, and 12th, under the presidency of Dr. Hubert Boëns, of Charleroi. Papers will be read by Professor Dr. Vogt, Dr. Oidtmann, Dr. Walz, Dr. Schoppe, Dr. Schlaeger, Dr. Weber, Mr. Tebb, Mr. Baker, and in the discussions many of our distinguished continental associates will take part. A widely representative gathering is expected, and as Cologne is easily and cheaply accessible from England, we hope that our own countrymen may not be backward in attendance. Mr. Henry Pitman, writing to Mr. Tebb, observes:—

"If I were a linguist, I should be delighted to join in your Continental labours, the value of which can hardly be over-estimated. I hope our foreign friends may feel that they are working for the emancipation of the English people from the vaccine delusion quite as much as for their own medical freedom. International co-operation has been the great want of our movement."

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 32.] NOVEMBER, 1881. [Price 1d.

NOTES OF THE MONTH.

The International Congress at Cologne has been a marked advance on its predecessor at Paris, bearing all the signs of a growing and irresistible movement. Earnestness of purpose, fidelity to conviction, and willingness to make sacrifices for the cause they have espoused were conspicuous among the delegates. The unanswerable demonstrations of Dr. Oidtmann, the perspicacity and humour of Professor Vogt, and the trenchant eloquence of Dr. Boëns, the president, will not readily be forgotten by those who were privileged to hear them. The significance of the Congress was not overlooked by the Continental press. The *Cologne Zeitung* reported the proceedings with impartiality; *Galignani's Messenger* conveyed them to a multitude of English readers; and the *Times* and other home journals have reproduced them in abstract. The anti-vaccination movement in Germany is developed by many stages beyond that in England. In some of the States, like Wurtemburg, the majority in the Diets are in favour of repealing vaccination laws at once; but as action rests with the Reichstag, they have to exert their influence through the imperial assembly. The contest in Germany has been made much easier by the more thorough and complete observation of facts. Viewed as an experiment—as a question put to Nature, vaccination in Germany has been brought to a far more accurate issue than with us; and such a ramshackle document as Dr. Buchanan's Memorandum on London small-pox, with its uncertain details and illicit surmises, would be regarded with contempt by German savants. The registration of infectious diseases, and the systematic administration of the law, have been the means of revealing, in a manner that leaves no room for dispute, that vaccination and re-vaccination confer no immunity from small-pox; and have gone far to warrant the conclusion that the insemination of variolous matter into the blood of the people predisposes them to attacks of the very disease it is designed to avert.

At the Social Science Congress in Dublin, Dr. Cameron, M.P., once more exhibited his extraordinary mare's nest. He postulates that primitive vaccination was much more efficient against small-pox than contemporary vaccination; and then proceeds to argue that the early efficiency was due to the use of cow-pox, and the later inefficiency to virus degenerated in passing from arm to arm, and to the introduction of Ceely and Badcock's variolous lymph; ending with the recommendation of a resort to cow-pox propagated on calves. We do not speak too strongly when we say that Dr. Cameron's contention from first to last is utter bosh. What proof is there that vaccination eighty years ago was a whit more efficient against small-pox than vaccination at this day? The whole population is now vaccinated, from palaces to slums. Eighty years ago the mass of vaccinations were effected on the middle and upper classes—on people who were, from their circumstances, comparatively exempt from small-pox, vaccinated or unvaccinated. Again, Dr. Cameron ought to know that the cow-pox he recommends was expressly rejected by Jenner; for the Gloucestershire dairy-maids, who caught it hot and strong from the cows, were notoriously subject to small-pox. For this reason Jenner deliberately set aside what he called spontaneous cow-pox (Cameron's pox), and prescribed cow-pox begotten of horse-grease. Dr. Cameron says, "Let us revert to the source from whence Jenner derived his success," but he has not the least intention of complying with the advice. Jenner found the English public would not endure to hear of horse-grease cow-pox, and, so that he might not miss their money, he submitted to their prejudice; but he none the less persisted in his opinion, and even made use of horse-grease for inoculation, dispensing with the cow, and described the filth as "the true and genuine life-preserving fluid." Dr. Hands, an old pupil of Jenner, agrees with Dr. Cameron that the virus in use for vaccination has deteriorated, but holds that it can only be restored to pristine vigour by reversion to horse-grease cow-pox, or to horse-

pox itself. We have as little faith in Hands as in Cameron, but there is no question that Hands maintains the true Jennerian tradition.

We, as Anti-Poxers, are often charged with vehemence and abuse of Poxers in their several varieties of Cow and Calf-Poxers, Small-pox Cow-Poxers, Horse-Poxers, Mixed Poxers, etc. It is meant, we suppose, that we ought to preserve unfailing equanimity in presence of medical stupidity, perversity, mischief, and falsehood, and be hit anyhow and foully, and never strike back. The charge of vehemence and abuse comes with singular grace from those who appear to fancy that to disbelieve in the various forms of pox quackery is to stand excluded from the courtesies of ordinary humanity. "Fools and fanatics," as descriptive of anti-vaccinators, has grown stale in newspaper and platform service, whilst resentment of the imputation is taken as evidence of its accuracy. The Rev. Samuel Haughton, M.D., observing at the Social Science Congress, that "there was no question as to the desirableness of vaccination," added that "the lunatics who did question it were out of court." We cannot return the compliment, for Dr. Haughton is not a lunatic, but he is something else; and his observation is a fresh illustration of the sweet reasonableness of the poxing fraternity.

Dr. Henry A. Martin, of Boston, is an extensive cow-pox cultivator and contractor, and at the meeting of the British Medical Association at Ryde was invited to join in the discussion on Animal Vaccination. Anything more sensational and frankly tradesmanlike than Martin's discourse it would be difficult to imagine. No quack that ever mounted a chair in a country market-place delivered himself with more assurance. He said he was called upon at times, at the very shortest notice, to vaccinate whole cities, and when he left America he had just completed the vaccination of the city of New Haven. The custom now was to send to him, or his son, wherever small-pox broke out, with orders at once to vaccinate the whole population of the city, town, or neighbourhood; and it was done immediately, the result being that the epidemic would be completely stopped in a week. His son was sending out 1,500 points of virus a-day, and had been doing so for months. Vaccination effected with their cow-pox was never followed by small-pox; it never excited erysipelas nor caused any appreciable harm to any creature. They had restored the vaccination of Jenner, and everywhere were rewarded with Jenner's success. Such absolute talk is very fine, but it is just the absolute talk of the vendors of specifics and panaceas from time immemorial. As for the claim of Jenner's authority for Martin's cow-pox, it is grossly unwarrantable. Such cow-pox as Martin traffics in was known by Jenner to be of no avail against small-pox, and because he knew its inefficiency, and because its inefficiency was well known, he set it aside, and resorted to the variety engendered by horse-grease.

What the doctors at Ryde thought of Dr. Martin's bouncing and marvellous testimony plainly appeared from the resolution with which the meeting concluded. Martin denounced the virus in current use for vaccination, and especially the virus derived from the inoculation of cows with small-pox by Ceely and Badcock, of which a quantity illimitable and indefinable is everywhere circulating from arm to arm. This Badcock virus, certified and approved by the highest authorities as identical with cow-pox, and accepted and issued by Government, was stigmatised by Martin as "an abomination"—an opinion concurred in with applause by many of the medical men present. In fact, distrust in the official virus pervaded the meeting, but there was an evident shrinking from giving it expression; Mr. Nunn observing that if they were tempted into its condemnation, "anti-vaccinators would be very joyful." At the same time, it is needless to say, the majority were far from disposed to take Dr. Martin's romance for gospel. Nevertheless, there might be something in this new exhibition of cow-pox, and there might not; but it would at least provide an alternative for the uneasy and scrupulous, and serve to maintain the vaccination fabric outwardly intact. Wherefore, after much dubitation, it was agreed to ride the two horses, and the following resolution was unanimously passed:—

"That this Section, while having full confidence in the present supply of lymph (which they manifestly and expressly had not), yet expresses a hope that the Local Government Board will proceed, without delay, to organise a supply of calf-lymph to public vaccinators from the Vaccine Department, as promised last Session to Dr. Cameron, M.P., and to request Dr. Cameron to assist us in this matter."

Mr. Dodson may fairly reply, "If you have full confidence in the present supply of lymph, why should we be saddled with the trouble and expense of a second supply?" As one of the heads of the Vaccine Department observed a few weeks ago, "When we set up first and second-class vaccination, it will soon be all first-class or none at all."

It is gratifying to know that one hundred thousand copies of Mr. P. A. Taylor's reply to Dr. W. B. Carpenter are in course of circulation, bearing enlightenment and conviction wherever they are read; and we hope soon to hear of a second edition with still wider extension. Our struggle is with gross ignorance and indurated prejudice in the upper and middle classes, but the truth once out and free to operate, progress will be rapid and victory sure. In general, the newspapers have met Mr. Taylor with silence, but what else is possible under the conditions? A reasonable attack on vaccination, sustained with medical evidence and official statistics, is more than the average editor is equal to. He fancies vaccination was coeval with the steam-engine, and is kindred with penny postage, free-trade, and the electric light, which only creatures sunk in darkness or afflicted with a lust of singularity venture to impugn. He has heard of the immortal Jenner, and the salvation he wrought ever since he got out of his perambulator, and in blind faith has received and emblazoned all the current fables about re-vaccinated hospital nurses who never take small-pox, about soldiers, sailors postmen, policemen, convicts, and ticket-of-leave men who enjoy a like immunity, whilst the unvaccinated die at rates ranging from 30 to 95 per cent. To discover that all these nice stories, pat and perfect, with which he has plied his readers are more or less fictitious is not agreeable to the editorial mind; and, for a while, a discreet silence will be maintained. But we know the British editor too well to be discouraged. He does not like to wheel round, but when he wheels, he wheels; and by-and-by, when he perceives the public are ready, he will do his duty, and open fire to some purpose. It will be an ill day for the medical profession when the British editor discovers how he has been practised upon; when, for instance, he comes to understand the scope of their marvellous resolution passed at Ryde, that "while having full confidence in the present supply of lymph," or mixed pox, they yet ask the Government to provide them with cow-pox—for what? For an alternative means of imposing on the public

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And so Dr. Johnston, the author of the cruel libel on Mr. Escott, has taken shelter behind the Local Government Board, and we presume the Board becomes responsible for his defence. The untruth of the libel is demonstrated. The consequences attributed to Mr. Escott's conduct are proved to be figments of the public vaccinator's imagination. Nevertheless, Johnston's was an ingenious story, and exactly hit the popular taste. It had the run of the newspapers, and it served to convince the public afresh that there was no safety outside the Jennerian rite, and that those who neglected and despised its salvation were little short of wilful murderers. Dr. Buchanan fancied he had made a notable shot when he got his Memorandum into circulation with his variety of fancy figures, but the public are not apt at figures, and Dr. Johnston's romance was worth a gross of such documents. That it was untrue was of little account; it was believed, and calculated to do much good. If found out in Rotherhithe, it was not likely to be found out elsewhere, and might be trusted to serve the cause of vaccination wherever newspapers are read. The Vaccine Department of the Local Government Board have never been squeamish over the trivialities of truth, especially where anti-vaccinators are concerned, and Dr. Johnston is just their man; and when the annual bonuses are distributed, he ought to have a fifty-pound note at least for the Escott romance, and as compensation for his sufferings under our "mendacity." By-and-by he may be promoted to travel with Dr. Stevens to investigate vaccination disasters, and report them out of existence. He has qualifications that are thrown away in a place like Rotherhithe.

The Epidemiological Society have appointed a special committee to ascertain the conditions under which small-pox follows vaccination. The committee consists of Dr. Robert Cory, Mr. Shirley Murphy, and Dr. John McCombie, all fervid vaccinators, who may be likened to a trio of thriving publicans set to report on drunkenness. Letters are to be addressed to medical men, inquiring as to the cases within their practice of children under ten having small-pox, vaccinated in infancy; also of cases of small-pox among the same after ten; and also of deaths from all causes of vaccinated children up to the age of ten. Such an investigation is much to be commended; for facts, so that they be facts, are always instructive; but it is to be noted beforehand that the inquiry must largely overlook the lower classes, who yield the overwhelming majority of small-pox victims, of whom no practitioner keeps register, nor pursues the family histories. There are medical men in large practice who never encounter a case of small-pox, and attribute their exemption to vaccination, when it is really due to the sanitary well-being of their connection. The same number of poor folk, equally vaccinated, might furnish numerous cases of small-pox. Unless this qualification be borne in mind, the issue of the inquiry will be converted into a fresh means of public deception.

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DIFFUSION OF VACCINATION THROUGH EUROPE.

VACCINATION was accepted as a revelation, and diffused as a religion, and was almost everywhere received gladly. We have to bear in mind, however, that the way had been made straight for it by the practice of inoculation with small-pox; which practice, after a struggle prolonged over many years, had become an established part of medical art, and was only limited in its application by the inconvenience and risks that attended it. The promise of the primitive vaccinators was, that the security that resulted from inoculation with small-pox was to be had from inoculation with cow-pox, with absolute certainty, absolute safety, and absolute permanence. The argument was, that since no one could have small-pox twice (however slight the attack), and as cow-pox was a mild form of small-pox, it sufficed to be inoculated with cow-pox to be safe from small-pox through life; and if only the infliction of cow-pox were made universal, small-pox would be extirpated. Such was the plausible doctrine; so plausible that it had only to be stated to command assent; whilst so great was the elation over the discovery (as much, perhaps, for deliverance from inoculation with small-pox as from small-pox itself) that it was accounted a sacred duty to diffuse its benefits over the whole earth. Greater good on easier terms it was difficult to conceive. With a scratch of a needle one of the worst penalties attached to over-crowding, to filth, and to ill-living might be avoided and done away with for ever.

"How pleasant are such sugared lies,
Deceiving by their sweetness!"

The first cow-pox missionaries were Dr. Marshall and Dr. Walker. £100 was teased out of the Admiralty and £100 out of the War Office toward their expenses, and placed on board the *Endymion*, they proceeded on July 1, 1800, to the Mediterranean. At Gibraltar, Minorca, and Malta they vaccinated soldiers and sailors, first operating on orphans and foundlings to give the gallant fellows courage. Then Walker accompanied Sir Ralph Abercrombie to Egypt, from whence, after a variety of adventures, he returned to London to serve as domestic apostle, and vex Jenner for the remainder of his life. Marshall proceeded to Sicily and Naples. In Palermo, in the preceding year, 1799, there had been an epidemic, in which, it was said, 8,000 had perished, and Marshall appeared on the scene as a belated messenger of salvation. At Naples he had a cordial reception from the wretched Ferdinand IV. and his wretched court, who, with general indifference or enmity to what was good, were ready to show themselves gracious toward cow-pox. Marshall went through the customary performances of the variolous test and the exposure of the vaccinated to infection; and without further ado an hospital was opened, and all who would be saved from small-pox were entreated to hasten and receive the new inoculation.

"It was not unusual," wrote Marshall to Jenner, "to see in the morning a procession of men, women, and children, conducted through the streets by a priest carrying a cross, coming to the hospital to be inoculated. By such popular means, the practice met with no opposition; and the common people expressed themselves as certain that it was a blessing sent from Heaven, though discovered by one heretic and practised by another."

When Marshall was at Gibraltar, Lord Keith issued the following memorandum to the fleet:—

"H.M. Ship *Foudroyant*,
"Gibraltar Bay, Oct. 19, 1800.

"Any soldiers, seamen, or marines in the fleet who may not have had the small-pox, and wish to avoid that dreadful malady, may, by application to Dr. Marshall, on board the flag-ship, be inoculated with the cow-pox, which, without pain or illness, or requiring particular diet or state of body, or leaving any marks, effectually excludes all possibility of the patient ever being affected with the small-pox.

"By command of the Vice-Admiral,
"PHILIP BEAVER.

"To the respective
Captains of the Fleet."

We may observe in passing that there was little delay in introducing vaccination to the British navy. Sir Gilbert Blane was urgent, Earl Spencer, first Lord of the Admiralty, acquiescent, and Dr. Trotter, physician to the fleet, enthusiastic. So early as Dec. 9, 1800, Trotter was prophesying:—

"The Jennerian inoculation will be deservedly recorded as one of the greatest blessings to the navy of Great Britain that ever was extended to it."

Small-pox was one of the pests of the service. Trotter, writing Feb. 20, 1801, says:—

"Within the past seven years there have been more than a hundred instances in which the seamen have been infected; twenty having occurred in the last six months in the Channel fleet alone."

These outbreaks were invariably referred to an origin external to the ship; as if anywhere small-pox could have had a more congenial breeding-place than the crew of a man-of-war! As Dr. Johnson observed, "When you look down from the quarter-deck to the space below, you see the utmost extremity of human misery; such crowding, such filth, such stench!"* Incited by the enthusiastic Trotter, the medical officers of the fleet subscribed for a gold medal, and presented it to Jenner. On the obverse, Apollo was represented introducing a young seaman recovered from cow-pox to Britannia, who, in return, extended a civic crown, on which was inscribed JENNER; above were the words *Alba nautis stella refulsit*, and below the date, 1801. On the reverse was an anchor, and over it *Georgio Tertio Rege*, and under it *Spencer Duces*. The medal was presented to Jenner in February, 1801.

The dates are worth noting afresh. Jenner's *Inquiry* was published in the summer of 1798; and thus we see that within three years his prescription for the prevention and extermination of small-pox was adopted in a branch of the public service, where obstinate conservatism was the ruling temper; and an assertion that only time could test was accepted without hesitation

* Boswell (Croker's Ed.), vol. vii., p. 102.

as verified and certain. If vaccination had answered to the claim made for it, the haste wherewith it was acknowledged would have been unjustifiable, and wholly unlike the struggle that truth has commonly to pass through in order to obtain supremacy in the intellect and practice of mankind.

The first attempts to inoculate with cow-pox in France proving futile, Dr. Woodville went over to Paris in 1800 to show in practice the method of operation. He had a warm reception, and the quiet Quaker was overwhelmed with the exuberant attentions to which he was subjected. In the *Moniteur* he was described as "a learned man, animated with generous zeal, and worthy of gratitude and praise;" that he had inoculated six thousand children with invariable success; and that cow-pox as a preventive of small-pox could only be spoken of as something miraculous. A house was opened as a vaccine station, and men, women, and children flocked thither to receive the benign fluid and life-long protection from a dreadful malady.

When the negotiations for the peace of Amiens were in progress, 1802, an address was presented with much pomp to the Marquis Cornwallis by the Medical Committee of the Somme, claiming brotherhood with the physicians of England, eulogising Jenner, denouncing his detractors, stigmatising variolators as acting neither from the love of truth nor for the glory of their profession, but from avarice and hatred of improvement; whilst, as the result of numerous experiments, "the discovery made in England had been stamped with the seal of infallibility in France."

At first, vaccination in France was left to voluntary effort, and made little progress in face of a strenuous resistance developed by alarmed variolators; but a severe small-pox epidemic in 1802 incited the Government to action. A medical commission was appointed to investigate and report, and in 1804 it was determined to spare no effort to extend vaccination over the whole of France. A Central Committee for Vaccination was constituted, and appeals and commands were addressed to the clergy and officials of all orders to have those under their authority and influence inoculated with cow-pox. Some préfects were content to recommend and warn, but others adopted more vigorous measures, such as the exclusion of the unvaccinated from schools, from employment, from charities —in short, anticipating much legislation that has come into force, or that fanatics wish to bring into force. Nevertheless, the progress made did not satisfy Napoleon, and seeing that until vaccination was everywhere paid for by the State, its performance must remain irregular and perfunctory, a manifesto was issued to the effect that his Majesty the Emperor and King had learned from the reports of the Central Committee that the preservation and increase of his vast dominions were immediately related to systematic and universal vaccination; wherefore his Majesty, wishing to give a signal mark of his paternal solicitude for his subjects, had granted to his Excellency the Minister of the Interior, an annual special credit, destined to provide for the expenses necessary for extending the new practice, and for forming centres of issue of vaccine virus in twenty-four of the chief cities of the Empire—these, then, including Brussels, Florence, Parma and Turin. And his Majesty had also, out of his paternal benevolence, provided annual prizes as incentives to emulation in propagating vaccination, so that the scourge of small-pox might be completely banished from his territories.

It would be idle to speculate as to how much serious faith lay within this apparent zeal for vaccination; for, as Professor Seeley observes, "Napoleon seemed to care for no opinion, though he adopted with studied artificial vehemence every fashionable opinion in turn." There might be, we dare say, something piquant to his theatrical genius in opposing his odious contempt for human life to the rigorous enforcement of what was considered a supreme prescription for its preservation. Jenner availed himself of the Emperor's histrionic instinct in soliciting the release of English travellers detained in France. To one of these occasions we owe the artless anecdote of the arrest of Napoleon's refusal by the interposition of Josephine, who exclaimed, "Jenner!" The Emperor paused and said, "Jenner! ah, we can deny nothing to that man!" It is sad to relate the favour was not reciprocated. When Jenner, at the suggestion of Baron Corvisart, appealed to the British Government for similar indulgence to a Frenchman, he had to report that there was no charm in his intervention among his countrymen.

That vaccination should have a welcome in Spain was not surprising, after its reception in Naples. The craze was universal, and diffused through the lowest intelligences. Cow-pox was introduced to Madrid with the certificate of France under that of England; and, spite of the distractions of the time, excited much attention. Mr. Allen, secretary to Lord Holland, writing to Jenner from Madrid in 1803, observed:—

"There is no country likely to receive more benefit from your labours than Spain; for, on the one hand, the mortality among children from the small-pox has always been very great; and, on the other hand, the inoculation for the cow-pox has been received with the same enthusiasm here as in the rest of Europe; though I am sorry to add that the inoculation of the spurious sort has proved fatal to many children at Seville, who have fallen victims to the small-pox after they had been pronounced secure from that disease." *

There were philosophising doctors in Madrid who did not see why cow-pox should possess a singular efficacy, and induced the King, in 1804, to order that all the children in the foundling hospital should be inoculated with goat-pox. They did not, perhaps, know that Jenner had inoculated his son with swine-pox, and that the child underwent the variolous test on several occasions with impunity.

The great event in connection with Spain was the expedition of Dr. Francis Xavier Balmis, physician to his Catholic Majesty. He obtained a concession to introduce vaccination to the

* Baron's "Life of Jenner," vol. i., p. 604. Allen little suspected that there never was any spurious cow-pox; that it was only "spurious" when it did not prevent small-pox.

colonies in America and Asia, and to defray expenses by freely trading in merchandise. He sailed from Corunna Nov. 30, 1803, with twenty-two children for the propagation of virus. The Canary Islands were first visited, then Porto Rico, and at Caracas the party divided, Don Francis Salvani proceeding to Peru and Chili, whilst Balmis attended to Cuba and Mexico, crossing the Pacific to the Philippines with twenty-six children to maintain the succession of the virus, and proceeding from thence to Macao and Canton. Having circumnavigated the globe as vaccinator and trader, Balmis re-appeared in Madrid with great *éclat* and kissed the King's hand on Sept. 7, 1806. Philanthropy and business were successfully combined, for as Moore, writing in 1817, observes:—

"Nearly three years were nobly spent by this excellent man in putting a vaccine girdle round the globe; and it is an additional pleasure to learn that by trading during his circumnavigation, he acquired an easy fortune. He now enjoys at Madrid the distinction he has merited, and patronises the diffusion of vaccination through the Peninsula."*

The expedition of Balmis naturally excited much attention, and its progress and results were described in terms of inflated rhetoric. Thus, we read in Baron's "Life of Jenner":—

"The conductors of the expedition were *everywhere* welcomed with *the utmost enthusiasm*. It was to be expected that the representatives of the Spanish Monarch, and all the constituted authorities, would gladly co-operate; but it was scarcely to be anticipated that the unenlightened minds of the Indians would so soon appreciate the value of the mission. It is, nevertheless, most gratifying to know that the numerous hordes which occupy the immense tract of country between the United States and the Spanish colonies *all* received the precious fluid with *the utmost readiness*. They acquired the art of vaccinating, and soon performed the operation with great dexterity."

Thus not only the Spanish Americans were brought under the dominion of cow-pox, but the Indians, yea *all* the Indians; and not reluctantly, but joyfully, and became experts in the practice of the rite! Baron continues:—

"Fame had preceded the arrival of Salvani at Santa Fé. On approaching the capital, he was met by the viceroy, the archbishop, and all the civil and ecclesiastical authorities. The event was celebrated with religious pomp and ceremonies; and in a short time more than fifty thousand persons were vaccinated. Similar honours awaited the expedition *throughout its whole course*. At Quito they were greeted with boundless joy and festivity. Such expressions well became them. The people of Colombia, the Indians more especially, having been often scourged by the horrid ravages of small-pox, regarded it as the most terrible affliction which Heaven could send them. On its first appearance in a village, a panic seized every heart; each family prepared an isolated hovel, to which those who were supposed to be infected were banished. *There*, without succour, without remedy, and with a very insufficient supply of food, they were exposed to the alternations of a very variable climate, and left to their fate. *In this way whole generations perished.* Under Viceroy Toledo the population of the native Indians had amounted to 7,500,000; but at the time of the Balmis expedition, the number was supposed to be reduced to one fifth"—that is 1,500,000.*

On another occasion we may examine Indian and savage statistics in connection with small-pox and vaccination. At present we need only remark that statements like the foregoing are to be regarded as exercises in imaginative desire—less what is true than what was wished to be true, or to be taken for true. We know the difficulty of vaccinating populations dwelling within defined limits and under highly organised governments, and can therefore estimate the claims made for Balmis and his partners as roving traders and quacks in the territories occupied by Spaniards and Indians. Yet it was with yards of mythical rubbish of this sort that English vaccinators tried to divert the attention of their countrymen from the failures of vaccination within their own experience; and when worried with ever-recurring tidings of disaster at home, it was in turning to Mexico and Peru that Jenner professed to find consolation.

Dr. Sacco, of Milan, was described as "the apostle of vaccination in Northern Italy," and "unquestionably the greatest vaccinator in the world."† His operations received the sanction of the Napoleonic administration, and as early as 1801 he was appointed Director of Vaccination to the Cisalpine Republic. "Strong measures," writes Moore, "were adopted; proclamations were read from every pulpit; vaccination was practised in every church; and the clergy gave such effectual aid, that the Professor and his associates in three years vaccinated 70,000 persons, and extinguished small-pox in Lombardy."‡ In other words, the vaccination of 70,000 persons extinguished small-pox in a population of several millions! Baron enlarges the numbers, saying that Dr. Sacco and his assistants in the course of eight years vaccinated 1,300,000 persons; and cites a letter from Sacco, dated from Trieste, Jan. 5, 1808, with the following extraordinary statement:—

"During eight years I reckon more than 600,000 vaccinated by my own hand, and more than 700,000 by my deputies in the different departments of the kingdom. I assure you, out of a population of 6,000,000 to have vaccinated 1,300,000 is something to boast of; and I flatter myself that in Italy I have been the means of promoting vaccination in a degree which no other kingdom of the same population has equalled." §

Moore's 70,000 is a credible number, whatever may be thought of its vicarious operation; but Sacco's 600,000 by his own hand in eight years! Ah, well! when we are lost in the fabulous, it is unnecessary to waste our strength in the discrimination of the greater from the less in falsehood. Nevertheless, taking Sacco's figures, we have to observe that the vaccination of 1,300,000

* "The History of Vaccination." By James Moore. London: 1817. P. 279.

* Baron's "Life of Jenner," vol. ii., pp. 80-2.
† *Ib.*, vol. ii., p. 234.
‡ "History of Vaccination." London: 1817. P. 263.
§ Baron's "Life of Jenner," vol. ii., p. 112.

saved 6,000,000 from small-pox. That Italy was freed from small-pox is true, and the exemption of the population, whether vaccinated or unvaccinated, was prolonged over nearly thirty years. The disappearance of the disease had, however, set in before vaccination was heard of, but the subsidence was claimed for Sacco, although it extended to millions of Italians who owed nothing to the new prophylactic. From some cause undefined, and possibly undefinable, the area and intensity of small-pox was signally diminishing in several European populations towards the close of last century, and this in spite of the stimulus applied to the disease by variolous inoculation. It may have been so stimulated as to have been worked out—forced, as it were, to exhaustion, after the habit of much else, good and bad, when developed to the extremity of existence.

As grand vaccinator Dr. De Carro, of Vienna, was scarcely less distinguished than Sacco. He was a Swiss from Geneva, who had studied and graduated at Edinburgh, and settled in Vienna. He performed the first vaccination on the Continent, in 1799, with virus conveyed on a couple of threads from Dr. Pearson; and in 1802 he succeeded in transmitting the first effective virus to India. De Carro conducted his operations with great energy and tact, and in 1802 he induced the Austrian Government to issue an ordinance conferring on vaccination Imperial sanction and recommendation. Concurrently with this activity small-pox abated, and *post hoc* was converted into *propter hoc*. De Carro was credited with the extinction of small-pox in Vienna, but it was never pretended that more than a portion of the citizens had been vaccinated, and those chiefly who, under ordinary circumstances, were least likely to be affected by the disease, the mass of the lower orders remaining untouched; Vienna thus supplying another instance of the vicarious influence of the Jennerian rite.

Sacco and De Carro corresponded with Jenner, and it is worth noting that both concurred with him in the opinion that cow-pox originated in horse-grease; and, further, that horse-grease was as good against small-pox as horse-grease cow-pox itself. Indeed, Sacco set up a stock of virus derived from horse-grease, operated with it, and supplied De Carro, who used it so freely in Vienna that, as he said, he could not tell the vaccinated from the equinated. Writing to Jenner, June 21, 1803, De Carro observed:—

"The means of making your discovery were everywhere; yet nobody before you had the least idea of the singular connection between the horse-grease, the cow-pox, and the small-pox."*

The favour shown for vaccination by the English Court facilitated its adoption throughout Germany; and yet it might be said the craze went of itself, compelling patronage and exacting advocacy. The King of Prussia opened a Royal Inoculation Institute in Berlin, and tracts and medals, speeches and sermons, were brought into requisition to recommend the new rite. From the furore created, many were led to believe that all Prussia was vaccinated, and as small-pox ceased to prevail, cow-pox had the credit. To vaccinate a nation, however, is far from easily accomplished, and when we refer to the official accounts, we discover that, notwithstanding great ado, the numbers operated upon constituted less than a tithe of the people. Jenner cites a report of Professor Avelin, of Berlin, in a letter to Moore, Feb. 15, 1812, as authority for these statistics:—

"The anniversary of the invention of the cow-pox inoculation, or the Jennerian Feast, was celebrated very solemnly at Berlin on May 14. By public accounts, it appears that there were inoculated in all the Prussian States—

In 1801	9,772
1802	17,052
1803	50,054
1804	102,350
1805	43,585

"At these times the population was about 9,743,000. From 1806 to 1810 (since the horrible war and the diminution of the population to 4,338,000) the inoculated were 160,329. Dr. Bremer alone at the Royal Institute in Berlin inoculated 14,605. The total, as officially and voluntarily sent to the Government, amounted to 402,720 vaccinated, but certainly one-half was not officially mentioned. It may certainly be at least 600,000, or even 800,000." *

Supposing a million had been vaccinated in Prussia in the course of ten years, let us ask once more, how could they have saved the remaining millions from small-pox? Yet, with knowledge of these figures, Moore, the Director of the National Vaccine Establishment in London, did not hesitate to write:—

"The King of Prussia directed his children to be vaccinated, and also issued orders that vaccination should be immediately employed in the army, and the new practice encountered no further difficulties. By which, and by the total abandonment of variolous inoculation throughout Germany, the small-pox rapidly declined; and in a few years was extinguished in some of the largest cities, from whose purlieus infectious diseases are expelled with great difficulty. Thus even in Vienna, where full four hundred persons had annually been destroyed by the small-pox, this mortality diminished rapidly after the introduction of the vaccine, and in five years absolutely ceased." †

Russia, of course, followed suit in cow-pox inoculation. At the coronation of Alexander in Moscow in 1801 a foundling was operated on, christened Vaccinoff, pensioned for life, and dispatched to St. Petersburg to serve as a source of virus for other foundlings. Then followed imperial decrees prescribing vaccination, and Dr. Crichton was directed to organise a medical staff for the performance of the rite in each province of the Empire. In 1811 a ukase was issued commanding all Russians to be vaccinated within three years. As measuring the possibilities of despotism in such a matter, we learn from Dr. Crichton that between 1804 and 1812 there were 1,235,597 vaccinations performed in Russia—a similar number to that which Sacco professed to have accomplished in Northern Italy in a like

* Baron's "Life of Jenner," vol. ii., p. 432.

* Baron's "Life of Jenner," vol. ii., p. 378.
† "History of Vaccination," p. 245.

period. It was estimated in Russia that of every seven children born, one perished of small-pox, and therefore Crichton argued the lives of 176,514 had (up to 1812) been saved by vaccination. The calculation illustrates the facility with which the early vaccinators deceived themselves —first, as to the certainty of their prophylactic, and, second, in assuming that the reduction of small-pox represented the reduction of mortality.

From Crichton, too, we learn that there were anti-vaccinists in Russia in those days:—

"Notwithstanding the supreme order of His Imperial Majesty, that all his subjects be vaccinated within three years, we find that, powerful as his Majesty is, this cannot be executed. There is a power greater than sovereignty, namely, the conscience or religious opinions of men, and in one or two of the distant governments there exists a peculiar religious sect belonging to the Greek Church, who esteem it a damnable crime to encourage the propagation of any disease, or to employ any doctors, or to swallow any medicines under the visitations of God. Reason has been employed in vain with these poor people; they have been threatened with severe punishments in case they remain refractory, but all to no purpose. You may well imagine that no punishment has been resorted to, though threatened, and the Government has come to the wise conclusion of leaving the dispute to time."*

To complete this rapid survey of the diffusion of vaccination through Europe, there remains Sweden, with Finland and Denmark; but as the case of Sweden is specially interesting and instructive from the fulness and precision of its vital statistics, coupled with the claim made by vaccinators that Sweden affords irrefutable evidence of the efficacy of their prescription, we reserve it for another article. There is nothing pleasanter than finding the strongholds of our antagonists, capturing, and occupying them.

MR. P. A. TAYLOR AND THE *BRITISH MEDICAL JOURNAL*.

THE absolute silence of Dr. Carpenter and the other *experts* in regard to my letter, proves to my satisfaction that they are rather "hard hit," as sportsmen say of a hare that crawls away to die! No *reply* to the facts has been attempted; at least, I have seen nothing beyond a little personal abuse, and here and there a little nibbling at some minor point.

The *British Medical Journal* of this week attempts a little of this nibbling at my figures, but it is only meant for those who have not seen my letter, against the facts contained in which it offers only whimpering puerility! As 100,000 copies of my lettter are now in process of circulation, any readers of the *British Medical Journal* who may desire to test the value of its article will have no difficulty in doing so.

P. A. TAYLOR.

22, Marine Parade, Brighton,
Oct. 17, 1881.

* Baron's Life of Jenner," vol. ii., p. 186.

THE INTERNATIONAL ANTI-VACCINATION CONGRESS.

THE second International Anti-Vaccination Congress, which has been anticipated with so much interest, was held at Cologne on the 9th, 10th, 11th, and 12th October. It has been a most encouraging success, and probably not exceeded by any public demonstration in the history of the movement.

It will be remembered that last year the first Congress was held at the Salle des Conférences, Paris, and had the effect of drawing public attention to the question of vaccination throughout the Continent, and especially in those States where the rite is enforced by pains and penalties. On that occasion the *Times* reporter attended several of the sittings, and was supplied with statistical and official evidence, whereby the failure of the State preventive was demonstrated. It is presumed that these documents were sent to Printing House-square, for immediately after an article appeared, Dec. 15, referring to the International opposition to compulsory vaccination, and submitting that, as the preventive dogma of the vaccinators could no longer be considered tenable,

"The advocacy of vaccination might with advantage be placed on a different ground from that which has commonly been urged by its supporters, and as if the operation might be recommended or enforced, not as a means of *preventing* small-pox, but as a means of preventing mortality from it when it occurs."

On October 9 most of the forty-five delegates and supporters who took part in the Cologne proceedings had arrived and assembled for a *conversazione* at the Frankischer Hof, and, after mutual greetings and congratulations, the meeting was called to order by Dr. Oidtmann. Each delegate announced his name standing, after a fashion common in some parts of Germany, and subsequently signed the register. Mr. Tebb, being called upon by the Chairman, made a few remarks expressive of his gratification over the re-union of so many friends in so good a cause, and pledging the co-operation of the London Society and other energetic English workers, until the mischievous and degrading laws in favour of vaccination were repealed.

Dr. Oidtmann then spoke as follows:—

"Gentlemen, we welcome the delegates of the Anti-Vaccination Societies of Germany, England, Belgium, Switzerland, France, and America. We thank you for your presence in the name of the children of Cologne, and in the name of the millions in Europe who suffer under the infliction of vaccination. We also welcome them in the name of that science by which we shall win back the liberty of which compulsory vaccination has bereft us. Lastly, we welcome you in the name of those members of the Imperial Diet, who have for ten years contended against compulsory vaccination, and who are resolved in the next session of the Diet to bring the law to a final reckoning.

"We shall proceed to redeem the pledges given at last year's Congress in Paris, never to rest until compulsion is withdrawn from vaccination throughout civilised society.

"In Germany the contest, waged for ten years, has brought upon our opponents many ignominious defeats, compelling them to a complete change of front. The medical press laboriously endeavour to conceal these disasters, but they are written at large in the new tactics wherewith they confront us.

"As to the fitness of Cologne for our place of assembly, let me mention a few incidents. In the Middle Ages it was alleged that old women enacted the part that is ascribed at this day to unvaccinated infants. When at that period pestilence broke out among men and cattle, old women were held accountable, were accused, prosecuted, and burnt. A compulsory law was then in existence, which bore a strong resemblance to one of our Vaccination Acts. The Grand Inquisitor Sprenger, in 1489, was the author of the law. Two centuries later this law was arraigned and repealed by the action of a citizen of Cologne. In 1640-1650 a Catholic priest, a Jesuit, Count Spee, challenged the atrocious law; denounced it as based on untruth; said it was impossible that any old woman could originate sickness and pestilence in man or beast; and his contention was, in the end, admitted in the ancient city of Cologne.

"From Cologne there has appropriately issued the grand petition to the Diet against compulsory vaccination, bearing upwards of 10,000 signatures. We have, too, the distinction of sending a citizen of Cologne to the Reichstag, a second Count Spee, Mr. Aug. Reichensperger, who has since 1872 been actively engaged in agitating for the repeal of the compulsory vaccination law.

"In Germany so much progress has been made that little remains to be done. The time has passed when our opponents dealt in scorn and vilification; and M. Pasteur dropped into an anachronism when some time ago he ventured to describe anti-vaccinists as ignoramuses. Even our nominal opponents are working for us. It was Virchow who attacked the inoculation of sheep and assisted to repeal the law; and it was Flinzer, of Chemnitz, who made an end of the chief data on which vaccine legislation is based. It is Dr. Thilenius, our leading pro-vaccinator, who surrenders statistics as the defence of vaccination, who exonerates from censure those who evade the law, and admits that the immunity of unvaccinated infants from small-pox is well known. Fifty years hence it will, perhaps, be said of these gentlemen, our opponents, that it was they who brought about the downfall of compulsory vaccination.

"The future historian may also allege that in ignorance and at the instance of life insurance companies, the German Diet enacted compulsory vaccination; but when better instructed by Virchow and others the Diet hastened to undo the folly.

"There therefore remains but little for us to accomplish in Germany, but the German anti-vaccinists will always be found ready to reciprocate the assistance they have received from England, Belgium, and Switzerland."

On Monday evening, at ten o'clock, the Congress was formally organised, under the presidency of Dr. Hubert Boëns, of the Belgian Academy of Medicine, in one of the large *salons* of the Hotel, and was supported by Dr. Adolf Vogt, Professor of Medicine and Hygiene, Berne University; Dr. H. Oidtmann, of Linnich, the able and indefatigable leader of the anti-vaccination movement in Germany, and the author of a score of works upon the subject; Dr. E. A. Meyner and Herr Löhnert, of Chemnitz; Dr. Weber, of Duisburg; Dr. Ch. Pigeon, of Fourchambault; Dr. H. Schoppe, of Bonn; Mr. Thomas Baker, of the Inner Temple; and Mr. William Tebb, of London, &c.

Much regret was felt at the unavoidable absence of that veteran opponent of medical despotism, Count Zedtwitz, of Vienna. A meeting of the Dutch Anti-Vaccination League was convened at Amsterdam on October 9, to elect delegates to the Congress, but as none attended it was supposed that some misunderstanding had occurred with reference to the date. A letter from Dr. Monnik, of Vorden, bears out this surmise. It will be remembered that last year Holland sent four delegates to the Paris Congress, of whom two were professors at the Amsterdam University — Dr. Fabius, Professor of Jurisprudence, being Secretary of the League for Holland, which aims to abolish a system of indirect compulsion, similar to that which prevails in the United States of America.

A series of maps were exhibited, showing the incidence of small-pox and vaccination by Dr. Oidtmann, Mr. Carl Löhnert, and others; also tables demonstrating from Swedish official returns that small-pox epidemics have come and gone wholly irrespective of vaccination—the heaviest epidemics sometimes following hard upon the most thorough-going vaccination. The English Parliamentary Returns, Vaccination Mortality, No. 433, 1877; Deaths—England and Wales, No. 392, 1880; Mortality, General and Infant, No. 76, 1881; copies of the numerous works of Dr. Oidtmann, Dr. Hubert Boëns, Dr. A. Vogt, and Dr. C. Pigeon; Mr. Tebb's "Our Legislators on the Vaccination Question"; the "National Anti-Compulsory Vaccination Reporter"; the "Vaccination Inquirer"; "What Small-pox and Vaccination Is," by Mrs. Hume-Rothery; Dr. Garth Wilkinson's "Vaccination Tracts"; and about thirty different publications of the London Society; and photographs of cases of terrible injury and disease resulting from vaccination. The clever cartoon of the Leicester "Town Crier," showing how successfully Mr. P. A. Taylor had crushed and overwhelmed Dr. W. B. Carpenter, created much amusement. The extent and variety of anti-vaccination literature from the volumes of more than a thousand pages of Dr. German, of Leipsic, to the broad-sheets and leaflets of the various Leaguers, must have occasioned surprise to those visitors and reporters who were new to the subject. We hope soon to have a catalogue of the English and foreign publications, for the benefit of inquirers and others. Our space will not permit of our reproducing all the letters sent from Europe and America to the Secretary, showing the interest taken in this International gathering, but we cannot refrain from quoting a few. The Countess de Noailles, one of the most generous supporters of the cause in England, or indeed in Europe, wrote:—"You well know the intense interest which I have taken in the subject for fifteen years; in fact I am con-

vinced that compulsory vaccination is the greatest evil under the sun—in civilized countries at least—because the one that alone extends to every child born in the country, which can be said of no other bad law." Mr. Alderman Tatham, Mayor of Leeds, regretted his inability to attend, and wished the cause every success. Dr. C. T. Pearce, said: "I cannot but rejoice to know that a movement in which I took chief part in promoting in England so many years ago has spread so widely here, and extended so far in all the world." Dr. Ancelon, of Nancy, wrote:—"We are in France much interested in the success of the approaching Congress at Cologne, inasmuch as one of the deputies for the Department of the Meuse—M. Liouville—has formulated the malificent notion of proposing a murderous law (*loi meurtrière*) in France to compel all citizens to vaccinate and re-vaccinate according to the caprices and pleasures of Messieurs the vaccinators. You may reckon on my complete devotion to your cause." Dr. J. W. Jackson, one of the leading hygiests in America, dating from Dansville, New York, said: "My head and my heart are with the International League for obtaining the abolition of compulsory vaccination, but as it is impossible for me to be present, I beg to extend my most earnest wishes and sympathies for its success." Dr. G. Rushmore, of Plainfuld, New Jersey, wrote to Mr. Tebb:—"I am sorry that I missed seeing you when in this country two years ago. With your anti-compulsory movement I am in strong sympathy, and wish the Congress success." Dr. C. L. Spinzig, author of one of the most valuable and important works published in America on small-pox and vaccination, wrote from St. Louis:—"As early as my health will permit I shall reply to M. Pasteur, and hope to prove that the foundation of his superstructure is unscientific, and his deductions that the specific entity of cholera, anthrax, malaria, &c., can be counteracted by invaccinated poison, arbitrary and delusive. I hope you will meet with a satisfactory success, and that pretensions will be eradicated by truth." Mr. George Cotter Beale, whose activity is beyond praise, and who we had hoped would have represented Ireland at Cologne, wrote:—"I wish you all the success you could desire in connection with the approaching Conference." Mr. Henry Pitman, of Manchester, who has kept the agitation alive in a large district during some of the darkest hours in the history of our cause, and whose devotion and self-sacrifice has only been equalled by his modesty and intelligence, wrote:—"I hope our foreign friends will feel that they are working for the emancipation of the English people from the vaccine delusion quite as much as for their own medical freedom. International co-operation has been the great want of our movement." Amongst other letters, some of which are reproduced in our columns, and others reserved for publication, are those of Lord Clifton, Mrs. Hume-Rothery, Mr. P. A. Taylor, M.P., Mr. H. D. Dudgeon, Mr. George S. Gibbs, Dr. James Browne, Professor of Physiology, Oregon; Dr. J. Emery Coderre, Professor of Materia Medica, Victoria University, Montreal; Dr. Westermayer, Ecclesiastical Councillor and Member of the German Parliament; Herr Geo. F. Kolb, Member Extraordinary of the Royal Statistical Commission, Bavaria; Count Adof Zedtwitz, Rector; P. A. Siljeström, late member of the Swedish Parliament, and author of several pamphlets on the results of vaccination in Sweden; Mr. Kenchenius, member of the Dutch Parliament, and President of the Netherlands Anti-Vaccination League; Dr. Garth Wilkinson; Mr. Enoch Robinson, late Medical Officer of Health for Dukinfield; Mr. W. J. Collins, member of the Executive Committee of the London Society; Dr. Monnik, of Vorden, Holland; Mr. Henry Beigh, President of the American Society for the Prevention of Cruelty to Animals, New York; Mr. Francis Davis, jun., Enniscorthy, etc., etc.

On Monday, Dr. Oidtmann, as Secretary, opened the German Section of the Congress, and proposed Professor Vogt, M.D., of Berne, as President, and Dr. Weber as Vice-President, which was agreed to. About thirty delegates were present, in addition to a score of visitors, representing France, Prussia, Saxony, Wurtemburg, Belgium, Switzerland, and England. The United States was represented by Mr. William Tebb, at the request of Dr. Alex Wilder, President of the New York Anti-Vaccination League. Dr. Hubert Boëns, in an adress of great force and eloquence, gave an historical résumé of the formation and results of the International League, and the hopes centered upon it for effecting the objects in view. He referred to the ignorance of the major part of the French and Belgian physicians on the vaccination question, and dwelt at considerable length on the dogmas and pretensions of M. Pasteur, which he met and refuted point by point.

Mr. William Tebb was then called upon, and, after a few explanatory remarks relative to the position of the cause in England and its prospects, requested that his preliminary address, as representative of the London Society, which had been translated into German, should be read in that language. This was done by Mr. Von Cöllen, of Cologne, Municipal Councillor at Law, and Co-Secretary elect of the International A.-V. League for the year 1881-2.

Preliminary Address by William Tebb.

To my colleagues the delegates representing the opposition to Compulsory Vaccination Legislation in all nations, Oct. 10, 1881.

Speaking at this early stage of the proceedings, I venture to address a few words to you to express the satisfaction felt by my colleague and myself at meeting the delegates to the Second International Congress of opponents to Compulsory Vaccination. Last December, as you are aware, eighteen delegates assembled at Paris, representing eight different nationalities, and it is not too much to say that the result of that gathering was to give a fresh impulse to the swelling opposition to State medicine in England, and in many of the leading continental States. An interchange of ideas and a comparison of results must tend to strengthen our cause, and to stimulate with fresh ardour all who are engaged in this important movement. Errors in medicine in one country cannot be scientific truths in another. Mischievous practices may and have existed for generations in all countries; but their

overthrow will come all the sooner when attacked from many sides. In England, the initiation of these international gatherings has been regarded with great satisfaction, and their continuance is looked upon as one of the necessities of our position. On Aug. 3, thanks to the active co-operation of my friends and colleagues, Dr. Hubert Boëns and Dr. H. Oidtmann, I was able to announce to the London Society, that the Congress had been definitely fixed for the second week in October, whereupon the following resolution was passed unanimously by the Executive Committee:—"The members of Committee, having heard from its chairman, Mr. Tebb, that arrangements had been made for holding the second International Anti-Vaccination Congress at Cologne, in October, record their cordial satisfaction, and will do their utmost to further a project of so much importance." Letters from England, Ireland, and Scotland, from all parts of Europe, from Canada, the United States (both east and west), and from the West Indies have been received expressive of the pleasure this confederated opposition has afforded to those who are struggling in larger or smaller groups to arrest the mischievous official tendency towards despotic legislation, and a tyrannous system of centralisation. Medical men have got themselves attached to the State, with a powerful interest in her Majesty's Privy Council, with salaries, subsidies, and awards, and we all know that privilege never voluntarily surrenders. Some of the people suffer and submit in silence, hoping for coming relief, and their submission is quoted as a proof of their acquiescence. Others offer a persistent and irrepressible opposition at all costs and risks, and it is no exaggeration to say that they are the true successors of a noble lineage, of which no nation has a monopoly, whose fidelity to truth and suffering for right have kept liberty from being entirely strangled. They are now praying that the vaccine blot may be washed out from the soiled flag of European freedom, and are looking to our International Congress for deliverance from this enslavement with resolute hope. May I venture to say that it is not sufficient to bring together the overwhelming evidence against vaccination which we have before us, or to record our protest against its enforcement by Governments, but we must see that these facts are scattered broadcast by means of the Press; we must see that members of the various legislatures are instructed; that petitions are everywhere and at all times presented, demanding the repeal of these usurping laws, and that audiences are granted by those public officials who are misled by the spurious statistics of an interested profession. Schiller says: "Only a great object stirs the profound depths of humanity," and Matthew Arnold echoing the same sentiment, says, "Men are all Tories by nature when tolerably well off; only monstrous injustice and atrocious cruelty can arouse them." Our object is great, for it is as wide as civilised humanity, and the cruelty and injustice which we are trying to overturn are undisputed by everyone who will look into the facts; and if we perform our duty individually and collectively, a public opinion against compulsion will soon be created, stronger than any law, and before which the law and its despotic upholders must speedily succumb. In England, despite almost overwhelming difficulties arising out of professional prestige, and the enormous pecuniary interests at stake, the movement against compulsory vaccination is making rapid strides. Led by Mr. P. A. Taylor, M.P., the President of the London Society for the Abolition of Compulsory Vaccination, it is supported by Mr. Herbert Spencer, one of the greatest philosophers of our time; by Professor F. W. Newman, one of our ablest publicists; by Mr. C. H. Hopwood, Q.C., Member of Parliament for Stockport; Mr. Thomas Burt, Member for Morpeth; Lord Clifton, the Countess de Noailles, Sir Jervoise Clarke Jervoise, the Drs. Collins, father and son; Dr. Mackenzie, Mr. Geo. S. Gibbs, Mr. Alexander Wheeler, Mr. Hume-Rothery, the indefatigable President of the National Anti-Compulsory Vaccination League; and Mrs. Hume-Rothery, the able Editor of the *Reporter;* Mr. H. D. Dudgeon, Dr. Garth Wilkinson, Dr. Haughton, Mr. Gibson Ward, Dr. C. F. Pearce, Dr. Enoch Robinson, Mr. Henry Pitman, Mr. G. Cotter Beale, Mr. Charles Gillett, Mr. Young, Mr. Thos. Baker, and many others; nearly all of whom have personally expressed their wish for the success of this international appeal, and send with greeting expressions of sympathy with the objects of this Congress. The delegates here assembled may rely that the efforts of these co-workers, with thousands of others, will not be relaxed, and that through evil and good report, they may be counted on to stand with an unbroken front, until this obnoxious legislation, the offspring of folly, ignorance, and intemperate intolerance, shall be finally and definitely repealed.

Mr. Von Cöllen then addressed the meeting on the "Unconstitutional Nature of the Vaccination Law," and was followed by Dr. Oidtmann, who spoke on the present position of the Vaccination question in Germany, referring in feeling terms to the noble work of the late Dr. Germann, of Leipsic; and, in conclusion, suggested a working scheme for the anti-vaccinators of Germany.

The next sitting (at which many other newly arrived delegates were present, the entire number registered being upwards of forty) was opened by the Vice-President of the International League, Dr. Vogt, who read a paper on the History of Vaccination, the wit and irony of which were thoroughly enjoyed. He proved from the statistical records of nearly all civilised countries that the protection against variolous outbreaks claimed for vaccination was utterly opposed to evidence. The figures also showed a constantly-increasing susceptibility to small-pox as the vaccinated advanced in years, notwithstanding the prevalence of re-vaccination; whereas, prior to vaccination, nearly all small-pox mortality was confined to children, or to adults who had been inoculated. Dr. Vogt mentioned a significant fact, that previous to the year 1827, in France, when one-fourth of all the girls were vaccinated, and only one-tenth of the boys, the mortality of the girls was greatly in excess of the boys. Dr. Vogt was followed by Dr. Pigeon, of Fourchambault, who established the following propositions, which have been sub-

mitted in a letter to the Deputies of the French Chamber, namely :—

1. That variola is not a relatively serious illness.

2. That vaccination is no preservative against it.

3. That this same vaccination, on the contrary, predisposes to variola, and renders it more dangerous.

4. That vaccination exposes to syphilis.

5. That vaccination exposes equally to various other maladies much more dangerous than the small-pox.

6. Lastly, that vaccination is a powerful cause of degeneration of mankind.

The evening session was opened by Dr. Weber. He spoke upon the vaccination question as viewed by medical men. They commence practice, he said, with unreasoning bias in favour of vaccination, and are too busy to inquire into the facts; whilst the Medical Press hold their readers aloof from examination or discussion. He also referred to the medical training in the Universities, where the instruction on vaccination excludes all facts adverse to the popular theory. Dr. Weber denied that vaccination is, properly speaking, a medical question, but is one which properly belongs to the people, who, by compulsory experience are driven to demand the why and wherefore.

Dr. Walz, City Councillor for Frankfort-on-Oder, omitted all scientific terms in his address, in order that it might be fully understood. He said it was to be deplored that the law which they were now trying to abolish was initiated under statements devoid of truth, as had been shown over and over again. He mentioned the serious maladies which were the outcome of vaccination, the cases brought to light being more numerous every day, as cause and effect were scientifically recognised. The Prussian Board of Health admits that every vaccination leaves a condition of fever to be got rid of, with not unfrequently eruptions. Most of the evil sequelæ of vaccination are, however, carefully smothered, or attributed by medical attendants to latent causes.

On the 11th the sittings opened at 9.30, when Dr. Oidtmann delivered an elaborate discourse of about an hour's duration, in which he reviewed the circumstances leading up to passing the Vaccination Act of 1872. He said it was one of the greatest psychological riddles of our century, that the advocates of impostures like variolation and vaccination, and the belief in their protective character, should have been able to dominate the whole world. He attributed the mischief to the falsity of the original reports, comparing them to counterfeit bills of exchange. The Doctor proceeded to expose the statistics furnished to the Government, and showed from official returns that in other diseases, such as scrofula, diarrhœa, croup, brain, nerve and lung diseases, the mortality was much greater than from small-pox, and that the terror which small-pox inspired was entirely without foundation, It was absurd to select the latter disease for special compulsory treatment. The mortality statistics prior and subsequent to vaccination clearly proved that vaccination had in no respect lessened the general death-rate. The German official statistics in this respect were confirmed by the English "Blue-books." Dr. Oidtmann concluded his able address amid loud applause.

Dr. Schoppe, of Bonn, spoke on vaccination, as a factor in the health and up-bringing of the child. He saw that the evils attending the operation were not new to the present generation, but were known to Jenner's contemporaries, who observed the eruptions, glandular swellings, and deterioration of the infantile constitution. Scrofula, he thought, might in some, cases be attributed to bad nourishment and improper parental management, as well as to bad lymph. Sometimes children with good constitutions passed through the vaccine fever harmless, but in others it was an excitant of maladies which were of life-long duration. Medical men, he was sorry to say, had no sound knowledge on these important matters, and were kept in ignorance through prejudice.

Herr Zoppritz, of Stutgardt, gave a description of vaccination as adopted in Wurtemburg, where young bulls are used as vaccinifers, and not calves or heifers. The lymph is extracted from pustules on the scrotum by a painful operation, being pressed out by tweezers. It was incredible that the injection of such a product into the skin of a little child could produce anything but evil.

At the open meeting in the evening, at which there was a full attendance, Dr. Boëns commenced by saying that the International League had undertaken a noble work in the interests of humanity. It was not difficult to prove that vaccination is an evil *per se*, and the fruitful cause of disease and death to many thousands in all countries. Sometimes the evil is apparent, but often the seeds are sown in the system, and the diseases are not manifest for some years, and statistics show how little vaccination protects from small-pox. Formerly it was claimed that the rite afforded protection for life, then for twenty years, then for ten years, but all these claims have proved alike false. On the other hand, vaccination undermines the constitution, and if re-vaccination, now demanded by the medical profession, is persisted in and adopted, the entire must become physically degenerate.

Dr. Ch. Pigeon declared that no enlightened physician is now afraid of small-pox. It was a malady easily amenable to rational treatment, but it serves the purpose of the vaccinationists to pretend to the contrary. He had no fear of the contagion. Doctors, he said, often held on to vaccination through the pecuniary bias, and no language was too strong to reprobate such mercenary conduct. It was now time that they should work together to obtain the objects of the League, and to procure the freedom of the press in respect to the discussion of this important subject (loud applause).

Mr. Thomas Baker, of the Inner Temple, London, furnished some valuable facts concerning the recent small-pox epidemic in London, and the re-vaccination panic which had tended to intensify

the outbreak. He deprecated the conduct of the press in persistently concealing the true facts, both as to vaccination and its injurious consequences.

Professor A. Vogt, of Berne, shared with Dr. Pigeon his fearlessness with regard to the contagion of small-pox, and said he would like to visit all the countries where vaccination is not enforced, in order to ascertain for himself whether it prevails to as great an extent as in pro-vaccinating countries. He compared the pro-vaccinators to the priests of the church, who threatened the tortures of inferno to those who questioned the true ecclesiastical faith; whilst the latter predicted the curse of small-pox to those who scoffed at vaccination. He then referred to the statistics of small-pox and vaccination in various cities in Austria, Russia, and Turkey, and to the mortality from small-pox of the vaccinated French soldiers at Shanghai at the time when the unvaccinated Chinese soldiers in the same district had no small-pox. He furnished figures to prove that the attacks in the well "protected" districts in the East Indies were 25 per cent. more than in those districts where vaccination was much less in vogue. In the Dutch East Indies small-pox has much more extensively prevailed since the Jennerian era than before. Dr. Vogt's address was touched throughout with a delicate irony, and was frequently applauded during its delivery and at its close.

Dr. Von Cöllen, of Cologne, said that only one side of the subject was, properly speaking, "a doctor's question," and gave a résumé of the present state of the question in Germany. He referred to the vaccination of recruits in the German army in 1826, who eight years later were re-vaccinated, showing that even at that early period the protection was only thought to last less than a decade. At that time the dangers arising from vaccination were but little understood, and there was no law to enforce it; but now that compulsion is practised by the State, the belief in its protective virtues has all but disappeared. The speaker then proceeded to detail the circumstances under which the compulsory law was carried in 1872, asserting that there was only a small majority of the Reichstag in its favour, and indicated that there was now a strong reaction against vaccination. After the law was enacted, agitation set in, which had been gradually increasing up to to-day. Laws, good or bad, were, like men, known by their fruits, and the fruits of this law were pitiful indeed. It was admitted that no physician could be certain that any vaccine lymph was secure from danger, and yet, no matter how terrible the consequences, the law put its shield around the vaccinator, and refused to punish him. He hoped that these abominable laws would soon be utterly abolished.

On the last day of the Congress, the 12th, after reading sundry letters and despatches, Herr Löhnert, of Chemnitz, addressed the meeting, and said that in his own town hardly any of the unvaccinated, between birth and ten years of age, had died of small-pox. Dr. Müller, of Berlin, questioned the truth of this statement, but has since confessed its accuracy. Small-pox, he maintained, was to a large extent kept alive by vaccination, and it would take more than two generations after the practice had ceased ere the disease could be exterminated.

Dr. Oidtmann said that Pasteur's experiments, even where the deductions were correct, were only analogies, and not proofs.

Herr Zoppritz spoke of the importance of electors pressing members of the Reichstag to give more time and attention to the vaccination question. This had been done by members of the Wurtemberg Diet, the result being that nearly all were now opposed to compulsory vaccination.

Dr. Oppenheim, of Cologne, declared that the Democratic members of the Reichstag, without exception, were unanimously against both vaccination and its enforcement.

Mr. Tebb's address on Vaccination, or Sanitation, as a preventive of small-pox, was then read in German. He commenced by referring to the terrible condition of England in the sixteenth and seventeenth centuries, when all zymotic diseases were rife, to the want of drainage, defective water supply, intramural interments, filthy habitations, and still filthier streets, illustrating his theme by citations from Macaulay and other historians. He traced the steps of the earlier sanitarians, Dr. Southwood Smith, Edwin Chadwick, and others to amend these defects which ultimately led to the passing of a series of acts, beginning with the Public Health Act in 1848. He showed that small-pox could not exist where there was proper sanitary observances, and contended that even if it could be proved that vaccination either acted as a mitigant or preventive it was in the present state of sanitary science wholly unnecessary. He gave illustrations of what had been done in banishing this and other distempers by various improved dwellings associations in London, and mentioned several districts in the Metropolis, where, with favourable sanitary surroundings, small-pox was of the rarest occurrence, and had been, indeed, practically annihilated, even during the most severe epidemics. He quoted Dr. Farr and Prof. Playfair to prove that no epidemic could withstand cleanliness, and contended that Governments were without excuse for continuing a system which, besides being non-preventive, is the source of unspeakable evils.

Dr. Walz quoted statistics as to the extent and virulence of the present small-pox epidemic in London, and yet in no city had vaccination been more persistently carried out.

Here ended the business of the Congress. The delegates next discussed the place of meeting for the Congress of 1882, and the claims of London, Berne, Geneva, and Brussels were severally considered. London was rejected on account of the indifference with which the question is treated by members of the English Parliament, who seem inexcusably ignorant of all the later facts and evidence which are current on the Continent. Switzerland is waiting to see what course the Reichstag may take in the debate next session before legislating further on the subject. It was thought expedient, under all the circumstances, to carry the standard into the centre of the German pro-vaccination camp, which is at Berlin, and a resolution to hold the next Congress in that city was carried unanimously. A hope was expressed that the work in England would be pro-

secuted with vigour, so that the Congress might be held in London in 1883.

The following gentlemen were then elected members of the Executive Committee of the International Anti-Vaccination League for the ensuing year:—

President—Dr. Hubert Boëns, Charleroi, for Belgium.
Dr. H. Oidtmann, Linnich, for Prussia.
Herr G. F. Kolb (Member of the Royal Statistical Commission), Munich, for Bavaria.
Herr Hugo Martini (Advocate and Notary), Leipsic, for Saxony.
Mr. William Tebb, London, for England.
Dr. A. Vogt (Professor at Berne University), for Switzerland.
Dr. Reitz (St. Petersburg Imperial Hospital), for Russia.
Signor Jules Vizcarrondo, Madrid, for Spain.
Dr. Grysanowski, Leghorn, for Italy.
Rektor P. A. Siljeström, Stockholm, for Sweden and Norway.
Count von Zedtwitz, Vienna, for Austria.
Mr. Keuckenius (Member of the Netherlands Parliament), The Hague, for Holland.
Dr. Alex. Wilder (Prof. United States Medical College), New York, for United States.
Dr. J. Emery Coderre (Prof. University), Montreal, for Canada.
Dr. Bertherand, Algiers, for North Africa.
Mr. B. T. Hutchinson, Capetown, for South Africa.
Dr. C. Taylor, St. Thomas, D.W.I., for West Indies.
Mr. D. Macallister, Melbourne, for Australia.

Dr. Von Collen, 8, Berlich Strasse, Cologne, and Mr. William Tebb, of 7, Albert-road, Regent's Park, London,
were elected Honorary Secretaries of the International League; to whom all communications may be sent.

From Mr. P. A. Taylor, M.P.

22, Marine Parade, Brighton,
Sept. 30, 1881.

My Dear Sir,—I am sorry that it will be impossible for me to attend the Congress to be held at Cologne next month.

Please be good enough to congratulate the delegates from me on the ever-increasing strength of our good cause.

The list of distinguished names throughout Europe, and also in the United States now openly pledged never to rest until compulsory vaccination is abolished, deprives our opponents of all decent pretext for repeating that the system of vaccination is only repudiated by a few ignorant fanatics. Hitherto the term *fanatic* has been understood as applicable to those who affirm without reason, and believe without evidence. Under this interpretation it is not we, but our opponents who deserve the opprobrious title. The experts of *our* Local Government Board proclaim a conspiracy of silence, and most of our newspapers unworthily accept this *mot d'ordre*, and refuse all replies to the sophistries and misstatements of the vaccination experts; while we, on the contrary reply solely upon open and free discussion, and support our position by reference to official statistics which our opponents cannot well repudiate.

Under such conditions the result of the Congress cannot but be of the greatest value.—Yours truly, P. A. Taylor.

From Mr. Thomas Burt, M.P.

Newcastle-on-Tyne, Sept. 27, 1881.

My Dear Sir,—I thank you for your invitation to the Anti-Vaccination Congress to be held at Cologne. I regret that my engagements make it impossible for me to be present. My sympathies are entirely with the objects at which you aim. I heartily wish you success.—Very truly yours, Thomas Burt.

From Lord Clifton.

Cobham Hall, Kent, Sept. 25, 1881.

Sir,—Accept my apologies for my unavoidable absence, and the assurance of my most hearty sympathy with the objects of the Congress. The members will remember my name being mentioned at the Paris Congress as having sent in my resignation of the magistracy to the Lord-Lieutenant of my county entirely on account of the repugnance I felt to the administration of the vaccination laws. Until those laws are repealed, I will never return to that office. It is, indeed, an extraordinary tyranny which compels a parent to suffer his three-months' infant to be *poisoned* by a deadly blood poison, whatever might be the expediency of enforcing measures really sanitary, really preservative.

But vaccinationist medicine and "la médecine conservatrice" are at opposite poles of science. The one aims at maintaining the natural strength, that the force of disease may be overcome; the other burns and destroys, that nothing may be left to destroy in the future.—Accept, Sir, the assurance of my highest consideration.

Clifton.

From Mr. Moncure D. Conway, M.A.

London, Sept. 26, 1881.

Dear Sir,—I shall be unable to attend the meeting at Cologne, though I would gladly do so. As yet vaccination is a "question" in my mind, a thing not clearly determined upon and settled as in yours. But one thing is not a question with me any more; that is, the unwisdom and injustice of compulsory vaccination. Compulsion is unfair and impolitic in all cases, except those in which there is a consensus of the competent. In this case there is not only no such consensus, but the tendency daily is to reduce the majority of scientific men who have faith in vaccination.—Faithfully yours,

Moncure D. Conway.

From Mr. Charles E. Taylor, M.D.

St. Thomas, Danish West Indies,
Sept. 13, 1881.

Dear Sir,—I shall feel obliged if you will convey to the delegates my sincere good wishes for the complete success of the Congress, and my regret at not being able to assist them in the good work.

They are labouring to save a large *portion* of the human race from incalculable misery in the

future by relieving them from the imposition of an infamous and bloodthirsty law.—Yours very truly, CHARLES E. TAYLOR, M.D.

From MR. GEORGE S. GIBBS.

Darlington, Sept. 27, 1881.

MY DEAR SIR,—I took a great fancy to Dr. Oidtmann, and do heartily wish that I could accompany you to see him once more as well as to promote the cause of liberty in this regard.

I am sometimes very much disheartened at the want of spirit among those who are quite convinced that we are right, and yet allow themselves to be driven into appearing to support the wretched law either by a culpable silence or by allowing their children to be operated on, and so swelling the numbers at Whitehall, so forcibly quoted against us among the ignorant people of influence. In spite of all discouragements I hope you may have a successful gathering at Cologne. I suppose the projected law for France was not passed. This is a point that should be touched on at the Congress, and if you have opportunity to direct attention to the conclusive testimony of the French Academy statistics as to the inutility of vaccination somebody might take up the work of insisting on the authorities paying some attention to them.—With kind regard to all our colleagues, I remain, yours truly, GEORGE S. GIBBS.

From RECTOR SILJESTRÖM.

(Late Member of the Swedish Parliament.)

Sept. 28, 1881.

DEAR SIR,—I rejoice that the importance of statistics seems at last to be acknowledged in reference to the vaccination question, and I am only sorry that the simple method has been overlooked so long. I hope that plain arithmetic may in future discussions have the acknowledgment to which it is entitled, and that statistical errors will be resolutely set aside.

It will, perhaps, prove more difficult to remove another error that is too common, namely, that vaccination is a medical question, upon which physicians are the most competent judges. It is altogether otherwise. The question is not a medical one at all, but a statistical and political one. As soon as compulsory vaccination is introduced it becomes a question for every citizen. And from this point of view it seems to me the question is disposed of. If, as the evidence proves, the general mortality is not in the least increased by small-pox, it is plain that the State has no occasion and no right to enact any compulsory law. It is without doubt a complete, and completely insupportable tyranny too, for the State to impose on the individual a surgical operation by which an illness as dangerous, or perhaps more dangerous, than the one sought to be averted can be induced. It is even more than tyranny; it is a crime, an offence against the dignity of humanity, and a shame upon science.

As regards the efficacy of vaccination in averting small-pox, that also is reduced to a statistical question. It is indeed strange that in the present condition of physiological knowledge so little distinction is made between the medical and the preventive treatment of disease. On this point it is not possible to be too explicit.

I look for good results from the Congress at Cologne. The more I think about vaccination, which I at first took up accidentally, the more I am convinced of its enormous importance. If the possibility of this and that kind of poisoning by vaccination is proved, and can no longer be denied, the danger of its conversion into a prescription for all nations cannot be overrated. It is worse than a leap in the dark—a procedure that neither conscientious legislation nor conscientious science can tolerate.—Yours respectfully, P. A. SILJESTRÖM.

From DR. GEORGE FREDERICK KOLB

Member Extraordinary of the Royal Statistical Commission for Wirtemberg.

GENTLEMEN,—I live in the conviction that compulsory vaccination is doomed, although I do not entertain any illusion as to the immediate issue. In this, as in every case where we have to deal with deeply-rooted prejudice, success can only be achieved with great pains and persistent exertion.

Well, there has been a fair start. The ice has already begun to crack—thanks to the efforts of many who will assemble at Cologne. The end will be achieved—it is only a question of time. Several favourable symptoms are already apparent. Formerly the advocates of vaccination refused discussion, pretending they could not endure our roughness and ignorance; but this reticence is giving way under the pressure of necessity. Their mere iteration of exploded assertions is ceasing to prevail on the public credulity. Their elaborate calculations of small-pox mortality, carried to the third and fourth decimal place, in countries like Bohemia and Galicia, where the data for such calculations were non-existent, were too much for endurance. I exposed the imposture in my work on vaccination, and no one has even attempted to vindicate what hitherto was blindly accepted for statistical verity. Nevertheless, these fanciful figures were taken as a basis for a report to the Swiss Federal Council. In the same report the immunity of the vaccinated from small-pox is assumed and asserted, when in Berlin alone in 1871 there were 1,191 vaccinated children under five years of age attacked, and 484 of them died. That is *suppressio veri et suggestio falsi* indeed. A mistake may be excused in the first instance, but if repeated after exposure, how shall we qualify it? It appears to me that vaccinists in their contention with us persistently hold by irrelevant accessories, and leave the main issues untouched, which also is perverse and deceptive, and indicates conscious weakness and the sense of a questionable cause.

Wherefore, let us be of good courage, and steadily maintain the truth, and victory shall be ours.—With my best salutations and wishes, I am, gentlemen, yours, G. F. KOLB.

From SIR J. CLARKE JERVOISE, BART.

Idsworth, Horndean, Hants,
Oct. 11, 1881.

MY DEAR SIR,—I wish you all the success you deserve. For myself, I cannot doubt that the true science of Liebig, as to the cause of disease, and its progress, fermentation, putrefac-

tion, and decay, will hold its ground at Cologne against the hypothesis of Pasteur, backed though it may be by Mr. John Simon and Dr. W. B. Carpenter.

The difference between contagion and infection, when clearly understood, would dispel the superstition as to the spread of zymotic diseases, and put an extinguisher on vaccination and quarantine, except for political and financial ends. — Very faithfully yours, J. CLARKE JERVOISE.

From DR. GARTH WILKINSON.

76, Wimpole-street, Cavendish-square, W.,
London, Oct. 11, 1881.

MY DEAR BRETHREN,—I cannot attend your meetings, but I am fully with you in the whole compass of your great object. The movement which you represent gathers like a river as it goes on, and it cannot be long before Europe and America take earnest heed to its world-wide importance.

The vaccination movement also grows, and shows its evil tendencies more and more, and corrupts the pseudo-scientific medicine of the hour to its very core. Pasteur's experiments are the most complete exhibition of this fact. His end would be, could he obtain it, to poison all the blood of all the flocks and herds of the world, in order to keep them in health for the use of mankind. How little he and his like know of the nature of the seeds of evil; of the fruits that are inevitable from them!

His process also is absolutely inconclusive. He makes two artificial diseases of his own producing modify each other, and argues as if they were the diseases to be combated. They are not, and never can be those diseases. Anthrax artificially given is not anthrax caught epidemically. If anthrax ceased altogether after his inoculations, there would be no proof that it ever would have occurred had he not practised them. And in the meantime the positive side is, that he is poisoning all domestic animals for generations.

Your brother in the work,
J. J. GARTH WILKINSON.

MR. ESCOTT'S CASE.

OUR readers will be concerned to hear the position of this extraordinary case. Mr. Escott instructed his solicitor, Mr. R. Chapman, to write to the Rev. E. J. Beck, demanding a retractation and apology for his slanderous speech as chairman of the Rotherhithe Vestry. Mr. Beck, in reply, expressed regret for his vehemence, but justified it on the score of Dr. Johnston's letter, which, taken for true, went far, in his opinion, to warrant his observations. Thus the parson sought shelter behind the doctor. At the same time, Mr. Chapman wrote to Dr. Johnston, and received from him the following note:—

"157, Jamaica-road, London, S.E.
"Oct. 4, 1881.

"DEAR SIR,—I am in receipt of your favour of the 3rd inst. When I offered a copy of my report, I was under the impression that your client was Mr. Escott: I have no doubt from what I have since learned that in this I was mistaken. You will understand my meaning. I must therefore refer you to the Local Government Board for any information you may require.

"I remain, dear Sir, faithfully yours,
"R. Chapman, Esq., "W. BEECH JOHNSTON."
"92, London-wall.

Thus the parson sought shelter behind the doctor, and the doctor behind the Local Government Board!

Mr. Chapman, still pressing Dr. Johnston for satisfaction, received this amazing letter:—

"157, Jamaica-road, S.E.
"Oct. 6, 1881.

"DEAR SIR,—Yours of the 5th received. Without for one moment doubting your statement that your client is Mr. Escott, I must point out to you that the miserable fanatics who have caused him all this trouble are still using him as a dupe, and are loudly proclaiming their patronage, and boasting that they are finding the funds in this matter.

"I think that when you see the last issue of the organ of this charming Society you will hardly wonder at my refusal to assist their machinations; and although I would willingly do anything in reason to assist Escott, whom I look upon as a victim to their mendacity, I must decline, under these circumstances, to do anything other than refer you to the Local Government Board, who will use their discretion in the matter.

"I remain, dear Sir, faithfully yours,
"R. Chapman, Esq. "W. BEECH JOHNSTON."

A piece of writing like the foregoing relieves us from description. See, we say, Dr. Johnston! A convicted false witness complains of mendacity, and attributes the consequences of his fictions to certain miserable fanatics! The Local Government Board have a singular worthy to account for.

We are glad to observe from the local press that Mr. Escott's case is now well understood in the neighbourhood, and that the version of affairs we set forth last month has been confirmed in every particular. We have since made Mr. Escott's acquaintance, and can easily understand the respect in which he is held by those who know him in Rotherhithe and Bermondsey; and that he should have been subjected to atrocious calumny and injured in means and business while overwhelmed with domestic affliction, provokes in us indignation that we hesitate to express. Mr. Escott is not only entitled to the sympathy of those who recognise in vaccination a cruel imposture, but of those who love justice and hate iniquity. A more flagrant outrage on private character, under cover of public service, never came under our observation.

Whilst Mr. Escott's case is understood in Bermondsey and Rotherhithe, we regret to say that, with the honourable exception of the *Echo*, not a single newspaper (apart from the local press) has withdrawn or apologised for the repetition and enlargement of Dr. Johnston's fictions. Thus it is with fables invented for the greater glory of vaccination. "If they aren't true," as the old lady said of a similar set of fables, "they ought to be." Yet the very people who practise such craft affect horror of what they are pleased to call Jesuitry!

ACCLIMATISED NURSES.

THE London correspondent of the *Sussex Daily News* wrote in that paper :—

"For downright folly commend one to the *Vaccination Inquirer*. That lively periodical, devoted to freedom of disease, has to deal with the fact that no re-vaccinated nurse employed in a small-pox hospital has ever fallen a victim to small-pox. It begins by saying that the general immunity of nurses existed before vaccination—which is altogether false ; and it accounts for the immunity by adding : 'So far as immunity exists [So far ! It is perfect], the true explanation is that the nurses are middle-aged women, past the time of life in which small-pox finds the majority of its victims. If we had the list of the nurses in any small-pox hospital, with their ages specified, the force of this explanation would be manifest. Again, there is something to be attributed to what may be called acclimatisation. If a woman engaged as a nurse endures the hospital atmosphere for a week unaffected, she may be taken as proof against small-pox for any term, the confidence and courage acquired from immunity constituting an additional safeguard.' Acclimatised to small-pox atmosphere ! This is lovely."

To which Mr. P. A. Taylor replied as follows :—

Sir,—Your London correspondent is a fervent advocate of vaccination, and he naturally loses no opportunity of instructing the public upon his view of the question. I venture, however, to suggest that a public instructor is bound to make himself acquainted with the facts of the question on which he writes. He re-asserts with great positiveness the old story that "no re-vaccinated nurse employed in a small-pox hospital has ever fallen a victim to small-pox." This is an oft-refuted fallacy, as he will see if he will do me the honour to look at my lately-published letter to Dr. Carpenter, p. 24–26. Your correspondent ridicules the idea of persons becoming acclimatised to small-pox atmosphere, exclaiming, "this is lovely !" On p. 25 of the letter, he will find quotations from the highest medical authorities, re-asserting, with emphasis, this long recognised fact. The assertion of the absolute immunity enjoyed by hospital nurses amounts to nothing less than a declaration that the atmosphere of a small-pox hospital is a distinct preservative against small-pox, seeing that it is now recognised by all who know anything of the subject, and is proved beyond dispute by official statistics, that many re-vaccinated persons have died of small-pox within the last few years, and some of them—notably our soldiers and sailors—living under peculiarly favourable conditions, lacking only that perfect immunity asserted to have been obtained by living in a small-pox atmosphere. P. A. TAYLOR.

To this letter the London correspondent rejoined, taking Mr. Taylor seriously to task for maintaining that the atmosphere of a small-pox hospital was a preservative from small-pox ! Whereon Mr. Taylor replied :—

"Your correspondent has ingeniously turned a statement, which I only mentioned to ridicule, as a grave assertion of my own opinion. He says that I assert positively that 'the atmosphere of a small-pox hospital is a distinct preservative against small-pox,' while, if he will look at my letter again, he will see that this absurd conclusion is one which I showed to be the inevitable deduction from his own statements, as thus :—'Those who believe that re-vaccinated small-pox hospital nurses never die of small-pox, and who repudiate the theory of acclimatisation to disease, *must* believe in the protective influence of the atmosphere of a small-pox hospital, *because* it is now placed beyond all doubt or question that thousands of re-vaccinated persons, not employed in small-pox hospitals, *have* died of small-pox within the last few years.' I cannot, of course, prove my case against vaccination in the few lines your courtesy can allow me, but I venture to suggest to all persons interested in knowing the truth about vaccination to do me the honour to read a letter to Dr. Carpenter, which I have lately published, and which I am gratified to learn, from all parts of the country, has not been without effect on the minds of many who had never before given the subject any really scientific consideration."

It is time we heard the last of the ingenious fable of the hospital nurses who never take small-pox. As we have pointed out, if a woman enters a small-pox hospital as nurse, she either succumbs to the atmosphere on entrance, and is not reckoned among nurses (having, as explained, had the disease upon her in the incubative stage); or she withstands the atmosphere, becoming day by day steadily fortified against its influence. The position really requires no argument, but is recognised by all who profess any acquaintance with the characteristics of infectious disease. Why, only the other day, we were reading an account in the *Daily News*, October 17, of the yellow fever, now prevalent in the West Indies, in which occurred this passage :—

"A remark made by a member of the Georgetown Town Council to the effect that a colleague, who objected to spending money on burning tar in the streets as a disinfectant, 'had been so long in the colony and so well nurtured that yellow fever was afraid of him,' reads like an ill-timed and ghastly joke, but experience appears to show that there is some truth in the statement, seeing that the effects of the disease are most severely felt by the resident Portuguese and by native-born Englishmen who have not lived long enough in the colony to become acclimatised."

Here we have an open confession of precisely what we contend for. The seasoned colonist does not take yellow fever, and the seasoned nurse does not take small-pox.

WE ONLY GET WHAT WE CRY FOR.—It is unfortunate, but it is the fact, that political changes do not result from the spontaneous study of difficult problems by statesmen in want of occupation. In the bustle and struggle of public life those who do not press their grievances upon the notice of statesmen stand small chance of being relieved.—*Daily News*, Sept. 29.

MR. JOHN ROBERTSON lectured on Sunday, Oct. 16, at Chambers-street Hall, Edinburgh, on "The Truth about Vaccination." About 150 persons were present, and followed, with close attention, Mr. Robertson's able presentation of the case against the practice. The lecture embraced the chief branches of the discussion—medical inconsistency, cooked statistics, increased fatality of small-pox, inoculation of other diseases, &c.

DR. CARPENTER ON VACCINATION.

Over the door of the temple dedicated to the idol Vaccination surely should be inscribed, "Who enters here leaves common sense behind!"

I connect the observation with the respected name of Dr. Carpenter only on the *a fortiori* principle. If a man so generally looked up to as a profound scientific authority, and so much respected for his high personal character, entirely discards logic and consistency in the vaccination controversy, what wonder if more ordinary mortals follow his example?

And now to illustrate my observation. Dr. Carpenter is so fervent a believer in the efficacy of vaccination that he declares (see his letter to the *Spectator* in April last), "That it is to the survival of a small unvaccinated residuum in this country that we owe the lingering of small-pox in our midst." *The lingering of small-pox*—not a word of devastating epidemics—impossible, of course, in a generally protected country! So far good.

But, now in his article in the *Nineteenth Century* for the present month, Dr. Carpenter, without apparently in the least perceiving the utter inconsistency of his admissions with his professed theory about vaccination, declares "The United States have been traversed (in the years 1874-76) by an epidemic of small-pox which will be long remembered there for its peculiar virulence, and the wide-spread mortality it occasioned. This epidemic was clearly the same as that which had prevailed with somewhat of the same severity not only in this country, but also over the greater part of Europe two years previously, and hence there can be little doubt that the high rate of mortality by which it was everywhere characterised, must have been due to general, rather than to local causes."

But what, then, about vaccination, which had been all over Europe, as well as in the United States, more practised than at any previous time?—so almost universally practised in this country that Dr. Carpenter himself, in the letter to which I have already referred, declared that the proportion of the vaccinated to the unvaccinated residuum in the metropolitan area was 300 to 1; and he adds; "this may be safely asserted to be rather within than beyond the mark."

Plainly rendered then, this is Dr. Carpenter's process of reasoning:—

1. Vaccination is a protection against small-pox, and none are endangered but the unvaccinated residuum.
2. Statistics, however, show that coincidently with the most thoroughly vaccinated epoch ever known, an epidemic remarkable for its "virulence" and "wide-spread mortality" has passed over Europe and America.
3. Therefore, wonderful is the efficacy of vaccination!

Nothing like this reasoning has been seen since the days of Dr. Sangrado, who, when Gil Blas represented that all his patients died, "as if they took a pleasure in dying merely to bring our practice into discredit," replied, "Why truly, child, if I was not so sure as I am of the principles on which I proceed, I should think my remedies were pernicious in almost all the cases that come under my care;" and, further, when Gil Blas suggests a change of method, the excellent Doctor observed, "I would willingly, but I have published a book in which I have extolled the use of"—Vaccination?

We are further informed that Gil Blas at once recognised the force of this answer, and rejoined, "Certainly; you must not give your enemies such a triumph over you; perish rather the nobles, clergy, and people, and let us continue in our old path."

But there are more wonders to follow in Dr. Carpenter's article. He recognises some advantages as following this virulent epidemic amongst populations well-charged with vaccine lymph. "It had the good effect of frightening many of our local health-authorities into a more efficient observance of their duty in regard to vaccination, and the result has been that during the last two years the reports of the Registrar General show an *almost complete extinction* of small-pox in the nineteen great towns whose aggregate population (about 3¾ millions) equals that of the metropolis."

Was there ever such a childish juggle?

In London, where the unvaccinated are declared to be only one in three hundred, there has been this year a serious epidemic. Therefore, vaccination is a protection. In the nineteen other large towns, where the amount of vaccination is certainly much less than this proportion, there has been "almost complete exemption" from small-pox, and again, how excellent a protection is vaccination. All roads lead Dr. Carpenter to the same happy conclusion.

Let me add one more argument for Dr. Carpenter's satisfaction.

In Leicester for the last two years (1879-80) the births have been 9,556, the vaccinations only 5,652, there has not been, I believe, a single death by small-pox; while in London, with only 1 in 300 unvaccinated, there have been many hundreds. *Therefore* the necessity of vaccination is proved!

How long will the people be ruled by such logic as this?

P. A. Taylor,
In *Echo* of Oct. 22nd.

The Vaccinated Press.—"In the social, as in the physical sphere, new diseases are continually making their appearance. One of the new social diseases of the present day, and certainly not the least deadly, is the perversion of public opinion in the interest of private or sectional objects by the clandestine manipulation of the press."—So writes Professor Goldwin Smith in the *Nineteenth Century*, and his opinion will go to confirm the suspicion of some of our friends as to the attitude of the press in the matter of vaccination; but in our opinion the suspicion is unfounded. The newspapers, especially the London ones, are unfair towards us with what often looks like *malice prepense*, but we are satisfied the injustice is due simply to ignorance and prejudice, and the honest belief that it is for the public good to thwart and suppress such mischievous wretches. Of course, in the case of a paper like the *Times*, which keeps a medical editor, vaccination is fought for tooth and nail on ordinary trade principles, as in the *Lancet* or *British Medical Journal*.

ILLEGALITY OF REPEATED PROSECUTIONS FOR NON-VACCINATION.

To the Right Hon. the First Lord of the Treasury and Chancellor of the Exchequer.

Cobham Hall, Gravesend, Oct. 9, 1881.

RIGHT HONOURABLE SIR,—Though I am aware that the Vaccination Laws are not within your province, either as First Lord of the Treasury or as Chancellor of the Exchequer, yet I venture to think that when a department of State is openly charged, as I have charged the Local Government Board, with illegally and unconstitutionally stretching the plain construction of an Act of Parliament, and when the Local Government Board has been repeatedly and exhaustively advertised of this alleged straining, both in its collective capacity and through its President—then I venture to think that, without damage to the principle that the office of "Prime Minister" is unknown to our Constitution, I may beg of you to use your position, as one of her Majesty's principal Ministers and advisers, to cause the question at issue to be properly submitted to the law officers of the Crown. I have already unsuccessfully asked the Secretary of State for the Home Department to submit a case to the law officers, but he declines to interfere with Local Government Board matters.

The case is as follows:—In 1867 a Compulsory Vaccination Act passed the Legislature. In it were two sections, Secs. 29 and 31, the original intention of which was clearly to be alternative modes of procedure for different children. Sec. 29 provided for an immediate information and summons for all children that should be undoubtedly within the scope of the Act *per se, i.e.* for children born in England or Wales, since the passing of the Act, and registered within the Union where they resided. Sec. 31 provided for a complaint, summons to show cause, order, and conviction for disobedience, in the case of all children not amenable to Sec. 29, *i.e.*, children born out of England and Wales, before the passing of the Act, or not registered within that Union where they resided—See letter of Privy Council to Poor Law Board 1867, which places it on record, even if it were not sufficiently obvious, that the main objects of Sec. 31 were as I have stated.

But this was not enough for the Poor Law Board. They noted with dissatisfaction that while Parliament had left out no case in which there could not be at least *one* conviction, there was nothing said as to the punishment of *continued default after conviction*, which would have been easily expressed by a few words appended to each Section, 29 and 31. Consequently, Mr. D. P. Fry, of the Poor Law, and now of the Local Government Board, hit upon the brilliant device of presuming a continuous connection between the two sections, and making the same parent amenable to both for the same child. This he called the "remedial" use of Sec. 31 (see his answers, 1871 Blue-book); "Sec. 29 was only *penal*, but Sec. 31 was *remedial*"; forgetting that Sec. 31 contained its own separate penalty; of this remedial doctrine there is no trace except in *his* utterances, and in the circulars of *his* official superiors. It is true that traces of this plan of surreptitiously dovetailing the two sections into the same continuous series were visible in the original Bill of 1866, which provided that a previous conviction (whether for same child was not stated) under that or any other Act should be no answer to the making of a magisterial "order to vaccinate." But this paragraph was struck out by the select committee of 1866, and Lord R. Montagu did not venture to re-introduce it to the *same* House in 1867.

Mr. D. P. Fry therefore acts in defiance of the decision of that committee. Can the Government expect that the thousands of anti-vaccinists can submit to be ruled by this legal assistant-secretary?

He says that the same parent of the same child can be guilty of two different offences, punishable under two different sections and modes of procedure in respect of that child. We say the refusal to vaccinate is one, continuous, and identical.—I am, sir, yours for truth and justice,

CLIFTON.

P.S.—Although most children are capable of being dealt with under *both* sections, the same argument applies to the case of children that have been found amenable to Sec. 31 only. It is equally unjust in their case to invent *several separate offences* punishable under Sec. 31, where there is really only *one continuous refusal* from the birth upwards.

MR. ALEXANDER McARTHUR, M.P. FOR LEICESTER.

LIKE many other M.P.'s, Mr. McArthur is undetermined on the vaccination question. They wait on the wind. If any advantage is to be had out of resistance to vaccination, they are ready to resist, but if no advantage is discernable, then "mum's the word." The *Town Crier* of Leicester observes:—

"Mr. McArthur's position on the question of Vaccination resembles that of the anti-slavery candidate described in the 'Biglow Papers':—

> 'Tell 'em that on the slavery question
> I 'm right, although to speak I 'm lawth;
> This gives you a safe point to rest on,
> An' leaves me frontin' South by North!'

Eighteen months ago Mr. McArthur wrote to Mr. Booth that if a Royal Commission on Vaccination were refused, he would vote with Mr. P. A. Taylor against the compulsory clauses of the Vaccination Act. Now he only says, 'I will go so far as to promise that if my colleague again introduces a motion on the subject of Vaccination, I will not vote against it, although I may not vote for it.' This leaves him 'Frontin' South by North.' Sandy is a canny man, but he may yet overreach himself by too much straddling the fence."

We have to say of many folk, inclusive of M.P.'s, they are not worth the trouble of converting. When the right time comes and the right men move, they follow without persuasion. We have them gratis.

ADMIRABLE LAW!

WHAT does it cost to avoid Vaccination? The answer depends on the locality of the questioner. In some places exemption is obtained on payment of a fine of 6d. or 1s.; in others of 2s. 6d., 5s., 7s. 6d., or 10s. In London, 20s. and costs appears to be the rule. In some places a struggle is set up between the Guardians and the Anti-Vaccinator, who is plied with summonses in hope of wearing out his resistance. Here is a case of the latter sort—an average case:—

CONVICTIONS OF GEORGE MITCHELL,

Of Bungay, Suffolk, for refusing to have his children vaccinated.

				Fine. s.	d.		Costs. s.	d.		Total. £.	s.	d.
Dec.,	1873 ...	Alice Margaret ...	First conviction	10	0	...	5	0	.....	0	15	0
March,	1876 ...	ditto ...	Cost of summons to show cause 6s....	20	0	...	5	0	.....	1	11	0
June,	1879 ...	ditto ...	Ditto ditto 6s....	20	0	...	5	0	.....	1	11	0
Oct.,	1880 ...	ditto ...	Ditto ditto 6s....	20	0	...	5	0	.....	1	11	0
										5	8	0
June,	1879 ...	Lizzie	First conviction	10	0	...	5	0	.....	0	15	0
Aug.,	1880 ...	ditto	Cost of summons to show cause 6s....	20	0	...	6	0	.....	1	12	0
Oct.,	1880 ...	ditto	Ditto ditto 6s....	20	0	...	5	0	.....	1	11	0
										3	18	0
Oct.,	1880 ...	James Edward ...	First conviction	10	0	...	5	0	.....	0	15	0
Aug.,	1881 ...	Summoned to show cause, and ordered by the magistrates to have Alice Margaret, Lizzy, and James Edward vaccinated within fourteen days, which expired Sept. 8. Cost of these summonses, 16s. 6d. Probable fine and costs, £3. 8s. 10d.....								4	14	6

Making total convictions, 11; total fines and costs, £14. 15s. 6d.

THE Belfast Justices had Mr. Thomas Strain before them the other day for the fourth or fifth time; and one of them said they *must* have his child vaccinated, or increase his fine. But they cannot increase the fine, and they cannot have his child vaccinated. Whoever can afford to pay the fine (and to many anti-vaccinators it is a bagatelle) can laugh at the law; and when some Guardians know they have a resolute antagonist to deal with, they judiciously let him alone. Such is the law! Is it not admirable in its equity toward the rich and the poor?

PREACHING BY EXAMPLE.

Camden Villa, Percy-road, Leytonstone,
Sept. 30, 1881.

SIR,—I have received your card, and beg to say I *shall* subject my child to the risks of vaccination. That a few men, who I presume are educated, should try to deter parents from performing one of their first duties to their offspring, to say nothing of breaking a just law, seems to me as lamentable as wicked. I am,

Mr. Wm. Young, F. G. WALKER.
114, Victoria-street, Westminster.

Every man to his mind; but Mr. Walker assumes the points at issue. We consider it our duty to withhold our children from vaccination, and, believing the compulsory law to be unjust, recommend disobedience. A citizen renders eminent service to the State by steadfast resistance to unjust law; it is preaching by practice, which is far more effective than speech.

OBITUARY.

Sept. 28, at the Grove, Holt, Norfolk, Major Hermann Karl Pertz, late of the Royal Prussian Engineers, in his forty-ninth year. To Major Pertz the anti-vaccinators of Germany owe the translation of the "Anti-Vaccination Tracts" of Wilkinson and Young into German. This work he accomplished with medical counsel to aid him. He was the youngest son of the Chevalier Pertz, of Berlin, once tutor in the family of the illustrious Count Stein, also author of a "Life of Stein, and of Gneisenau," editor of the "Monumenta Germanica," and librarian to the Royal Library in Berlin. Major Pertz himself served with distinction in the Franco-Prussian war. A brave, intelligent officer, and a kindly man, he is lamented by friends and comrades, and mourned by his widow and his family.

J. J. G. W.

A LITTLE "MATTER."—The other day Master Alfred, who has just been re-vaccinated, was asked by his mamma "how his arm was?" He groaningly replied:—

"The incessant irritation
of this beastly vaccination
is enough to vex-a-nation,
and it nearly drives me wild.
So I think that legislation
should prohibit vaccination,
and confer an obligation
upon every living child."

That's not so bad for a ten-year-old victim; but suffering, especially undeserved, makes even a juvenile pen as sharp as a lancet.—*Cosmopolitan.*

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 33.] DECEMBER, 1881. [Price 1d.

NOTES OF THE MONTH.

The monthly conferences of the London Society for the Abolition of Compulsory Vaccination for 1881–82, were opened on Nov. 23 with a lecture by Dr. Charles R. Drysdale on Animal Vaccination. It says much for the courage and good sense of Dr. Drysdale that he should thus have ventured to vindicate his faith in presence of those by whom it is most vigorously impugned; and we trust the Victoria-street Society may induce other medical men of distinction to come upon their platform and give similar proof of confidence in the Jennerian tradition. Great is the advantage of meeting adversaries face to face, and discovering in conflict what is weak and what is strong. Of Dr. Drysdale's discourse, the temper was admirable, but the matter was throughout questionable—the historical details especially so; and many of his beliefs and disbeliefs appeared to us rather whimsical than rational. An interesting and spirited debate followed, in which Dr. C. T. Pearce, Mr. J. H. Levy, Dr. Haughton, Dr. Clark, Dr. Renner, Mr. W. J. Collins, and Mr. Alex. Wheeler took part. Could the course of proceedings have been foreseen, it would have been well worth while securing a verbatim report, all the speeches being more or less charged with valuable matter. The chair was occupied by Mr. J. Passmore Edwards, M.P., who opened the proceedings with a noble exordium on the supremacy of scientific truth, the certainty of its prevalence, and the folly of striving against it; and although as yet undecided as to the value of vaccination, he united with Mr. Bright in denouncing the tyranny that subjected parents to repeated fine and imprisonment who were persuaded that, whilst vaccination could not save their children from small-pox, it placed their health and lives in deadly peril. Mr. Tebb was able to introduce a few apposite words on the aim and work of the London Society, and the increasing interest and success that attended it. In short, the conference of Nov. 23 was an occasion eminently satisfactory, and we hope it may be followed by many similar gatherings in Victoria-street.

Dr. Warlomont, of Brussels, is a shrewd old tradesman, and the craft wherewith he converts the *British Medical Journal* into his shop-counter is a study in commercial tact. Having cow-pox to sell as "pure lymph from the calf," he does not affront the prejudices of the profession among whom he looks for customers. He has nothing to say against the various poxes in currency for vaccination. He leaves their virtue undisputed. He has no wish to supersede existing methods of vaccination. He merely wishes to provide an irreproachable substitute, in order "to satisfy certain doubts, fears, prepossessions, and, perhaps, prejudices." He thinks that in countries where vaccination is compulsory, it is the duty of the State to put into the hands of the public a lymph that is beyond suspicion; and "this guarantee cannot be given with humanised vaccine, as proved by the existence of vaccinal syphilis." All this is extremely adroit, especially when coupled with a reference to Mr. Darke, "my London agent," who testifies that with Brussels points successful vaccinations are effected to the extent of 90 per cent. Dr. Warlomont has only one protest to make, namely, against Italian vendors of cow-pox. It seems that in Rome, the pustules on the cow are cut out and preserved entire between glasses, one being concave. At San Quireio, thirty-eight children were vaccinated in the height of summer with these morsels of putrescence, and many of them died. At Milan, the pox are also excised from the cow, pinned on a board with the bleeding surface downwards, scraped the scrapings mixed with glycerine, and the resulting "soft brown paste," packed for sale in goose quills. With such practices Warlomont holds no terms. "Nothing," he says, "is easier than to perform excellent animal vaccinations without having recourse to the Roman pustules or the Milanese marmalade."

As to the ease of these vaccinations, Dr. Warlomont is far from reassuring. According to him,

there is vaccination *and vaccinisation*, and it is the latter he practises. The vaccinated are systematically revaccinated until susceptibility to fresh insertions of virus has ceased—"a proof of the complete exhaustion of vaccinal receptivity"; for, as the Doctor argues, if a child can be revaccinated, *à fortiori*, it may take small-pox. Observe his words:—

"This is what I term *Vaccinisation*. Thus, every child brought back at the end of eight days should be re-vaccinated on the spot, even with its own vaccine, if it be in proper condition. If this second vaccination answer well, a third should be performed, and so on until the patient be completely *vaccinised*.

"I have a decided conviction, that if this practice were followed, if all children were *vaccinised*, the immunity from small-pox would be much greater than at the present time; and it is, perhaps, *from my having constantly put it into practice*, that my successes have been so constant, and the result of my vaccinations so thoroughly satisfactory."

So HO! and that is animal vaccination *à la Belgique*, is it? Our English calf-lymphers, who are never tired of magnifying Dr. Warlomont's operations, will hardly thank him for this inopportune revelation. They have urged the Government into the adoption of cow-pox, but said never a word about *vaccinisation!* That is reserved, we suppose, for future exhibition. When "pure lymph from the calf" is demonstrated nonsense, we shall then hear: "Ah, but we have not tried vaccinisation. It was in vaccinisation that our great Belgian leader discovered absolute protection." As Cobbett said, "Quackery has always a shuffle left." Dr. Warlomont admits that his method of working is at variance with Jenner's steadfast declaration that one vaccination prevented small-pox for life; but says he:—

"Jenner's opinion has no weight with me. In matters of experimental science, the predictions of the greatest geniuses only show the imprudence of those who express them. Facts have decided against the predictions expressed on this subject by the immortal discoverer of vaccination."

HAVING stigmatised Jenner's fault, Dr. Warlomont repeats it on his own account. It is objected that cow-pox is liable to communicate the diseases of the cow, and specially tuberculosis. It is impossible, protests Warlomont; and gives as a reason that Professor Virchow has shown there is no ground for the assumption that tuberculosis can be propagated by milk. But what warrant is there for arguing from milk in the stomach to the infusion of cow-pox into the veins? A few years ago, the possibility of the invaccination of syphilis was stoutly denied by medical men; but now, the fact is everywhere confessed, and Dr. Warlomont uses the confession as a means of pushing his own trade. Yet, if syphilis can be invaccinated, why not tuberculosis, one of the commonest and most deadly of bovine affections? It is convenient for Dr. Warlomont to deny the possibility; but outside his convenience there is nothing to be said. Dr. Warlomont throws over Jenner when it suits him, but claims his authority for his traffic in cow-pox, asking, "If it had not been efficacious in his hands, how could vaccination have come into practice?" and adding that "no one up to the present time has contested the security afforded by calf-lymph." That it is possible to advance such pretensions without instant contradiction proves how little is known of the history of vaccination. Whether it is cow-pox that Warlomont trades in has to be proved—there are grave doubts on the point; but if it be cow-pox, then we say that, according to Jenner, it is impotent against small-pox; and Jenner's evidence on this head is well supported and indisputable. Warlomont's cow-pox, or with its fancy title, "pure lymph from the calf," if it be cow-pox, is as good against small-pox as pills against earthquakes.

PROFESSOR M'CALL ANDERSON has been lecturing on Small-Pox and Vaccination to the Glasgow Young Men's Christian Association. The lecture was what is described in the vernacular as "cauld kail het again"—and sour, too. The well-worn stories and stock fallacies were set forth with no attempt at original treatment. It was remarkable that in Glasgow, of which town Dr. Cameron is the leading and popular M.P., it should have been possible to deal with vaccination as a uniform practice to which, as vaccination, no exception is taken. The reverse is true. Dr. Cameron not only says that vaccination as practised has ceased to prevent small-pox, but that it is probably accountable for the increased diffusion of the disease. Of this, Dr. M'Call Anderson took no reckoning, but, as observed, treated vaccination as at all times and everywhere the same. It is needless to say that such an assumption is grossly unscientific, and in presence of Dr. Cameron's constituents should have been resented as insufferable. Vaccination is not one thing, but several things, and whoever recommends it should be required to specify his prescription. "Define your pox!" is what the Christian young men of Glasgow should have shouted until they had satisfaction. Dr.

Anderson's discourse was seasoned with the usual references to the ignorance and fatuity of the opponents of vaccination. This abuse is becoming overdone; it is as silly and cowardly as it is untrue; a reaction will presently set in, when hard answers will have to replace such easy slander and cheap contempt.

Mr. Ernest Hart, the Editor of the *British Medical Journal*, in a notice of Mr. P. A. Taylor's reply to Dr. Carpenter, observes that "it is singular and significant that none of the opponents of vaccination are able to discuss the subject without accusing those who believe in its beneficent influences of *mala fides*." The charge is too broadly drawn, for no anti-vaccinator doubts that many who defend vaccination do so in the innocence of ignorance. As to the imputation of *mala fides*, it is confessed and it is justified; and we need hardly cite the well-known avowal of Mr. May to prove that the credit of vaccination requires occasionally (let us put it mildly) a free handling of the truth. But to come closer to the point. A few weeks ago, the *British Medical Journal* gave currency to the sensational story of Mr. Escott, an anti-vaccinator, having produced an outbreak of small-pox at Rotherhithe. The story is now known to have been the concoction of an ingenious public vaccinator, and may be shortly described as "a parcel of lies." Nevertheless, in the *British Medical Journal* no contradiction of the story has appeared. The fable, told for the greater glory of vaccination, is thought too good not to be true. "Sir," said a rascally slanderer, "we never retract such things." Again, Mr. Ernest Hart read a paper, "The Truth about Vaccination," nearly two years ago in the hall of the Society of Arts. Discussion followed, and his leading positions were assailed and refuted with such vigour and ability, that the lecturer sat helpless and discomfited. Even his chairman, Dr. Andrew Clark, expressed surprise that, in accounting for the reduction of small-pox, he allowed nothing for the influence of sanitary improvements. Everyone present must have seen that the advocate of vaccination had by far the worst of it. In the following number of the *British Medical Journal*, a report of the proceedings appeared, and how did Mr. Hart describe his successful adversaries? Here are his words:—

"A rather noisy discussion by anti-vaccinators followed the lecture, in which, however, no attempt was even made to meet the figures brought forward."

And it is the writer of this ignoble untruth who thinks it singular and significant that *mala fides* should be imputed to the advocates of vaccination!

Mr. Charles Dickens keeps a Family Doctor for the readers of *Household Words*, and true to his craft, he prescribed vaccination and re-vaccination as sovereign against small-pox. Thereon, says Mr. Dickens, he received a shower of post-cards, letters, and pamphlets protesting against the Doctor's advice, which he straightway consigned to the waste-paper basket; for, testifies Mr. Dickens, "I look upon the anti-vaccination people as a band of noisy and mischievous fanatics, impervious to reason and not to be reached by argument, with whom I decline to enter into discussion." Mr. Dickens, we reply, we have heard this sort of thing so often that we recognise it as a common dodge to escape reason and evade argument; and in your mouth it has no more meaning than in a parrot's. Of vaccination you know nothing. You are ignorant of its history, its operation, and its consequences; and yet you do not hesitate to pick up a railing accusation, and say of those who have made vaccination the study of years, that they are noisy and mischievous fanatics, impervious to reason, and beyond argument. You are no worse than many a gross of your fellow *littérateurs*, nor does your vituperation greatly affect us. We know its worthlessness, and we know, further, that when it becomes popular to repudiate vaccination, you will do so with the same competence and the same sincerity wherewith you now approve it.

Dr. Easby's correspondence with Mr. Wheeler is a fresh illustration of the prudence of the policy that leaves anti-vaccinators alone. Nothing is to be gained for vaccination by discussion. It is established in popular credulity; its practice pays well, and promises to pay better; and no good is to be got by encouraging disturbance. It exhibits far more discretion to assume that vaccination is beyond necessity of defence; that the whole educated world consents to its efficacy; and that only a few ignorant and perverse nobodies venture to question what is demonstrable as anything in mathematics. Medical men who take this lofty line cut a far more imposing figure than poor fellows like Dr. Easby, who are rash enough to enter into conflict with experts like Mr. Wheeler, and who are apt to emerge from the fight tumbled, confused, and breathless. Dr. Easby forgets that when an imputation is withdrawn, its resumption is an aggravated offence.

In *Church Bells* we find a homily on fanaticism as illustrated by resistance to vaccination. Fanaticism, it is said, "is the outcome, not of ignorance only or chiefly, but of selfishness, pride, and hardness of heart; it has neither true love and reverence for God, nor true charity for man." Such are anti-vaccinationists! Do we recognise our portraits? We might well feel depressed under such sanctified judgment, but when we learn from the same source that "during the recent epidemic in London nearly all the fatal cases were of persons who had not been vaccinated, or had been imperfectly vaccinated, or had been vaccinated a long time before," we recover our self-complacency. A preacher so fallible as to facts external may very well be at fault as to our internal relations with God and man. We acquire still further courage when the preacher cites the case of Mr. Escott, of Rotherhithe, as an awful example of what may ensue to those who neither vaccinate nor re-vaccinate. That story we have examined, exposed, and proved fabulous, and we call upon *Church Bells*, which assumes to "ring out the false, and to ring in the true," to ring accordingly.

VACCINATION IN SWEDEN.

Jenner was in the habit of pointing to Sweden and Ceylon as proofs of what vaccination might accomplish. We have seen how badly Ceylon answered to his references; and we now proceed to inquire whether Sweden served his purpose any better.

The decline of small-pox in some communities, contemporaneously with the introduction of vaccination, might be ascribed to the cessation of inoculation with small-pox—virtually the culture of that disease; but in Sweden little had to be accounted for in that way. Spite of strong recommendations, variolation was rarely practised, and never became popular. The very year that vaccination was introduced, Dr. Acksell, of Kalmer, stated in an official report, dated March 30, 1801, "that it is impossible to convince the lower classes of the advantages of inoculation. Dr. Colliander and I have had it announced to the people from the pulpit, that we were ready to give our services, gratis, in inoculating their children, but not a single person applied." And such undoubtedly was the state of things throughout the Kingdom.

Sweden last century was sorely afflicted with small-pox, and, considering the repute of variolation in other lands, it is surprising how the people refrained from its vaunted protection. It was thought dreadful that in London one death in ten should be due to this disease, but in Sweden the ratio stood as high as one in seven. To give some idea of the extent of the mischief at its highest and its lowest, let us look at eighteen years in the latter half of the century:—

Year.	Population.	Total Deaths.	From Small-pox.
1752.....	1,799,188	49,467	10,302
1757.....	1,870,372	55,829	10,241
1763.....	1,940,011	64,180	11,662
1768.....	2,006,790	54,751	10,650
1769.....	2,015,127	54,991	10,215
1773.....	1,972,407	105,139	12,130
1775.....	2,020,847	49,949	1,275
1776.....	2,041,289	45,692	1,503
1777.....	2,057,147	51,096	2,943
1778.....	2,073,396	55,028	16,607
1781.....	2,132,912	54,313	1,485
1784.....	2,145,213	63,792	12,453
1786.....	2,156,109	55,951	671
1787.....	2,163,862	51,998	1,771
1792.....	2,211,643	52,958	1,939
1797.....	2,322,814	55,036	1,733
1798.....	2,344,228	53,862	1,357
1800.....	2,347,303	73,928	12,032

In these figures we see how wide were the variations in small-pox mortality prior to the introduction of vaccination, and also how indifferent was its influence on the general mortality, much small-pox not raising the death-rate, nor little small-pox lowering it.

Among the factors of last-century mortality in Sweden is to be noted that of scarcity and famine. At this day, when the ends of the earth are drawn together, we are apt to forget the struggle, the misery and sickness that prevailed when a deficient harvest in one country, or parts of the same country, could not be made good from the sufficiency of others. Population in Northern Europe did little more than maintain existence through several centuries against the severity of Nature, with food scant and bad, and raiment and shelter inadequate. Of the latter fifty years of last century, at least fifteen were years of dearth in Sweden, and consequently of increased mortality.

The chief sufferers from deficient food are the young, their suffering having form in various ailments, and among them small-pox. We have repeatedly had to point out how small-pox is specially an affection of childhood, and how in Scotland, for instance, it used to be almost exclusively confined to the young, like measles and whooping-cough. The like was true of Sweden; for of the deaths from small-pox from 1774 to 1798—

8·19 per cent. were under one year of age;
21·90 „ were between one and three;
31·77 „ „ three and five;
23·74 „ „ five and ten;

a total of 85·60 per cent., thus being mere children. Or, to put it otherwise—

In 1778, when 16,607 perished, 13,096 were under ten
1784 „ 12,453 „ 11,789 „
1786 „ 671 „ 625 „
1798 „ 1,357 „ 1,207 „

and so on.

Now, whilst we have no wish to minimise the sadness and culpability of the mortality of the young, we have yet to maintain that its consequences are by no means so serious to the State as when the heads of families and breadwinners are stricken down; and that it is a gross exaggeration to compare the fatality of small-pox with that of men slain in battle. Again, we have to

recollect how many of the young die from small-pox, so to say, needlessly, from inattention and malpractice. This was clearly recognised in a Royal Letter issued from Stockholm in 1763, recommending variolation, in which the Medical Board was directed "to instruct the common people how children should be treated when suffering from natural small-pox," assigning the cogent reason, "because many more children die from want of care than from the disease." The assertion may be taken as indisputable, and, being true, it stands for the fact that the mortality from small-pox might have been illimitably reduced if the parents had had the knowledge and the means to nurse their offspring through their illness. They died less of small-pox than of ignorant and defective treatment whilst under small-pox.

We have also to observe that small-pox in Sweden was steadily declining towards the close of the century, and that the decline continued into the present century. Taking the years in decades from 1749 to 1868, and casting the average, we have these results:—

Decade.	Population.	Deaths Annually.	Annual Death-rate per 1,000.	Annual Deaths from Small-pox.
1749-58	1,821,009	50,556	27·76	6,056
1759-68	1,946,258	53,288	27·38	5,309
1769-78	2,028,141	59,262	29·22	4,535
1779-88	2,140,315	56,766	26·52	5,179
1789-98	2,246,744	57,883	25·76	3,810
1799-08	2,394,432	63,365	26·46	3,282
1809-18	2,444,568	67,537	27·63	690
1819-28	2,787,025	63,121	22·60	373
1829-38	2,976,829	70,168	23·57	633
1839-48	3,255,604	68,080	20·91	299
1849-58	3,588,571	78,218	21·80	816
1859-68	4,016,690	79,033	19·68	861

With these details before us, we are in a position to appreciate the claim made for Vaccination, that it exterminated Small-pox in Sweden.

Vaccination began to be practised in Sweden in the year 1801. It was at first viewed with distrust by some of the leading medical authorities, but grew so rapidly in favour that the Medical Board in 1803 ventured to make proposals for its general introduction. By Royal Letters in 1804 and 1805 measures were decreed for the encouragement of Vaccination; and in the almanacs for 1806 information and advice were inserted concerning "the new and certain means for the prevention and extirpation of Small-pox." Nevertheless, the practice made way but slowly into the confidence of the common people, and not until 1812 did a committee of the Diet go so far as to recommend its compulsory adoption. The principle of compulsion was affirmed by the Diet in 1815, leading to a Royal Decree of March 6, 1816, whereby Vaccination was made obligatory under penalty of fine and imprisonment.

Subsequently, the law was modified, but never relaxed. Whilst the rite was obligatory, it was offered gratuitously, and public vaccinators, usually parish clerks and midwives, were appointed throughout the land, and stimulated to exertion by special rewards. Vaccination was made a condition of admission to school, and was placed by the clergy on a level with baptism and confirmation. Wherefore, in course of time it has come to pass that Sweden is described as "the best vaccinated country in the world."

To this result the recognised interest of the Swedish clergy in medical practice largely contributed. They were not slow to perceive a fresh line of business in vaccination. Archbishop Lindblom, among others, was extremely zealous in promoting the practice in his diocese, and from a correspondence between the Consistory of Upsala and the Medical Board it appears that the competition between the physicians and the parsons was severe. The Consistory complained that the rewards for vaccination energy were more liberally bestowed on medical men than on the deserving clergy, and that it was unfair to insist on the clergy taking out a license to vaccinate; ending with the reproach that the mishaps of some medical men had so alarmed the people in certain districts, that very few were willing to avail themselves of the wonderful prophylactic. The Board replied, that they were aware that mistakes had occurred through the use of spurious cow-pox, as proved by the outbreak of small-pox afterwards; but, at the same time, what better check could be devised on incompetent practitioners than a medical license? The right of the clergy to vaccinate was not contested, but only that they should possess some recognised qualification. The extent of the ecclesiastical operations in cow-pox appears from the return of the Archbishopric of Upsala, which showed that from 1804 to the end of 1810 there were 33,298 persons vaccinated, of whom 7,025 were inoculated by clergy, 20,000 by church officers, and 6,273 by medical men and others. It was by the clergy and the doctors that the project of compulsion was initiated. In a letter from the Medical Board to the King in 1810, complaint was made that "the public in Sweden do not in all places manifest the care and zeal which might be expected from sensible and tender parents in applying for, or allowing to be applied, the precious means of salvation provided for their children's good looks and future health." In 1814, the same Board wrote that "several of the Bishops who take the deepest interest in the spread of vaccination have expressed their conviction that certain well-devised penalties have become as necessary as regards the ignorant masses as encouragements are useful"; and as late as 1815, the Board had to testify against the "sluggishness and indifference prevalent among the less enlightened classes."

Compulsion was, therefore, enacted in 1816 to overcome the inertia of the lower orders, the mass of the people who at all times yield the chief crop of small-pox.

"Small-pox was exterminated in Sweden by vaccination," is a common saying. Moore, in his "History of Vaccination," published in 1817, after describing the various measures taken, observed:—

> "It is superfluous to add, that by such a concurrence of virtuous exertions, small-pox was quickly suppressed in Sweden."

Ere proceeding to inquire whether small-pox was thus extinguished, we would call attention to the hands by which vaccination was ad-

ministered in Sweden. It is the custom at this day to describe vaccination as a delicate operation, and to attribute subsequent small-pox to some irregularity or defect in its performance; and yet here we are asked to contemplate a whole nation delivered from small-pox, the vaccinators being chiefly priests, clerks, and midwives. What does it mean? Is it that any sort of vaccination is good when small-pox does not follow, and that any sort is bad when small-pox does follow? If small-pox had not ceased out of the land, would it then have been said, "What wonder, considering the character of the vaccinators?"

To the assertion that small-pox in Sweden was exterminated by vaccination, the answer is an unqualified contradiction. It is not true; it is demonstrably untrue. Small-pox was declining in Sweden before vaccination was heard of, and the fall continued irrespective of its influence. Look at the figures. Here we have the returns of small-pox mortality in Sweden during the last sixteen years of the past and the first sixteen years of the current century, up to the time when vaccination was made compulsory:—

Year.	Deaths from Small-pox.	Year.	Deaths from Small-pox.
1785	5,077	1801	6,057
1786	671	1802	1,533
1787	1,771	1803	1,464
1788	5,462	1804	1,460
1789	6,764	1805	1,090
1790	5,893	1806	1,482
1791	3,101	1807	2,119
1792	1,939	1808	1,814
1793	2,103	1809	2,404
1794	3,964	1810	824
1795	6,740	1811	698
1796	4,503	1812	404
1797	1,733	1813	547
1798	1,357	1814	308
1799	3,756	1815	472
1800	12,032	1816	690
Total	66,866	Total	23,376

Thus we see the process of subsidence, with alternations from year to year, with the reduction of two-thirds, from 66,866 in the former to 23,376 in the latter series of years.

It will be said, of course, that vaccination was introduced into Sweden in 1801. True, but the introduction of vaccination was one thing and its diffusion over the nation another. It was a section of the people least likely to be affected with small-pox who welcomed and practised vaccination; and however energetic and successful they might be in their promotion of the new rite, their efforts were limited to thousands among millions. All the while small-pox was declining, and they took the decline for encouragement, and began to cry out, "See! see what we are doing!" The enactment of compulsory and gratuitous vaccination in 1816 was an open confession that the lower classes remained to be dealt with, that is to say, the very people among whom small-pox had its stronghold. There are tribes whose priests profess to bring rain and drive away sickness with their enchantments; but if showers had begun to descend and the sick to recover ere their assistance was invoked, it would be hard to convince even the credulous that the desired relief was due to their subsequent magic. But it is precisely in the subsequent magic of the vaccinators that we are asked to believe when told that vaccination drove small-pox out of Sweden. It was going out before vaccination was called in, and kept going out all the same when the vaccinators plied their enchantments. Happily, patient Nature holds her way unprovoked by human quackeries. Not even to confute impostors does she reverse for an instant her impartial operations.

But, although deaths from small-pox fell off so rapidly, there was no correspondent improvement in the public health. Small-pox was merely replaced by other forms of disease. Thus, the death-rate of Sweden per 1,000, for seventy years, stands as follows:—

Decade.	Deaths.	Decade.	Deaths.
1749—1758	27·76	1789—1798	25·76
1759—1768	27·38	1799—1808	26·46
1769—1778	29·22	1809—1818	27·63
1779—1788	26·52		

We therefore see that while Jenner and his friends were boasting of their achievements in Sweden, they had to account for the fall in small-pox before their intervention, and for its continued decline ere their intervention was operative; and, moreover, to answer the question, What is the profit of salvation from small-pox if death ensues from other causes? It is, however, to be observed that such large considerations were outside the scope of Jenner's intelligence, nor ever occurred to him. *There was* small-pox, and *there was* vaccination, *his* invention, the infallible preventive of small-pox, and he saw nothing beyond. His self-love was implicated in the defence of vaccination, and any story in its favour was accepted as true, and proclaimed abroad, whilst anything to its discredit was resented as a personal affront, or denounced as wilful and diabolic falsehood. As for statistics, he had no capacity. Baron says, "Neither Dr. Jenner's previous education nor his habits gave him a relish for any of the branches of pure science; and he seemed to have a peculiar horror of arithmetical questions, and was often jocular on this defect in his nature."* This inability to calculate goes far to account for the absurdity of many of his statements concerning the miraculous effects of vaccination among populations where only two or three per cent. had been operated upon; and who, therefore, must have vicariously delivered the remainder from small-pox. To an intellect thus defective, the introduction of vaccination to Sweden was the vaccination of the Swedes; the decline of small-pox was its suppression; and its suppression was the consequence of vaccination. But the excuse that is available for Jenner, does not serve those who cannot plead his congenital defect, and are satisfied to repeat his preposterous assertions.

Small-pox kept declining in Sweden until the decade (1841-50) when the annual average of deaths per million fell to 212. The variations in the mortality in single years are remarkable. Here are thirteen years when the deaths were under a hundred:—

* Baron's "Life of Jenner," vol. ii., p. 293.

1821 ... 37	1843 ... 9	1847 ... 13
1822 ... 11	1844 ... 6	1848 ... 71
1823 ... 39	1845 ... 6	1855 ... 41
1829 ... 53	1846 ... 2	1856 ... 52
1842 ... 58		

On the other hand, here are eighteen years when the deaths were over a thousand:—

1825 ... 1,243	1851 ... 2,488	1867 ... 1,061
1833 ... 1,145	1852 ... 1,534	1868 ... 1,429
1834 ... 1,049	1858 ... 1,289	1869 ... 1,474
1838 ... 1,805	1859 ... 1,470	1873 ... 1,122
1839 ... 1,934	1865 ... 1,336	1874 ... 4,063
1850 ... 1,376	1866 ... 1,217	1875 ... 2,019

The death-rate from small-pox, which fell to 212 per million in 1841-50, rose to 862 per million in 1851-60, to 867 per million in 1861-70, and, owing to the epidemic of 1873-74, the worst in Sweden since 1801, the last decade, 1871-80, will exhibit a much higher average.

In presence of these statistics, it is fair to repeat the inquiry, "Why was small-pox declining before vaccination was introduced; and why has small-pox revived and increased in 'the best vaccinated country in Europe'?"

Again, too, we must call attention afresh to the fact of the irrelevant influence of small-pox upon the national mortality. Mr. P. A. Siljeström has published a diagram of the course of mortality in Sweden from 1774 to 1878, with the part small-pox has played in that mortality, from which it is manifest (to all who choose to use their own eyes) that the action of small-pox as a destroyer of life has been wildly exaggerated.* Bad years of small-pox are not years of a high death-rate, nor are years with little small-pox years of a low death-rate. When small-pox is prevalent, it appears to replace other forms of disease, and when not prevalent, to be replaced by diseases of greater fatality. Wherefore, argues Mr. Siljeström:—

"Of what use is it to the public that a smaller number of citizens die annually from small-pox (supposing that this result is brought about by vaccination), if an equally large number, nevertheless, die from other diseases? We can see no further advantage in it than there would be in a battle, if none of the men fell before the fire of artillery, but all the more died from the fire of the line. To the individual it may possibly be more agreeable to die of any other disease than small-pox, and it ought, therefore, to be allowed to everyone to save himself, through vaccination, or any other lawful means, from an eventuality which he fears; but this cannot possibly, in itself, be regarded as the business of the State."

Sweden is a large country, and its diseases must be subject to many local variations; but Stockholm, representing a compact population, exhibits much the same phenomena. In some years of last century the city was severely afflicted with small-pox, as the deaths in these years show:—

1778 ... 639	1784 ... 411	1795 ... 447
1783 ... 714	1787 ... 414	1800 ... 703

* "Tables relative to Vaccination in Sweden, 1774-1778." London Society for the Abolition of Compulsory Vaccination. Price 2d.

These years were the worst; there were variations such as these:—

1780 ... 14	1785 ... 20	1797 ... 13
1782 ... 12	1793 ... 22	1798 ... 12

As in Sweden at large, so in Stockholm, a fall in small-pox had set in, and was continued into the new century, until years appeared without a single death; for which vaccination had the credit, and the disease was proclaimed "stamped out," none dreaming of reverses ahead. By-and-by it began to revive, and deaths were thus registered:—

1857 ... 319	1866 ... 157	1871 ... 113
1865 ... 273	1870 ... 96	1873 ... 191

And then came the dreadful epidemic of 1874, when 1,191 perished, and 317 in 1875.

Thus, in two years, 1,382 perished in a population of 150,000—a death-rate of 7,916 per million—against 2,430 per million in London during the memorable epidemic of 1871, the severest outbreak of small-pox in the century in "the best and most-vaccinated population in Europe!"

Apparently strong, the case for vaccination in Sweden altogether disappears under examination; and by Mr. P. A. Siljeström the examination has been conducted with a precision, a thoroughness, and a judicial temper that leave nothing to desire. His treatise was translated into English by Miss Frederica Rowan, and published in 1875, under the title of "The Vaccination Question: an Essay towards determining the Boundaries within which a Scientific Theory may rightfully claim to have effect given to it by Legislation;" and a skilful abridgment was produced by Professor F. W. Newman; but the original, which extends to no more than 104 pages, should be studied by all who are seriously interested in the vaccination question. Sweden, through the possession of a long series of vital statistics, offers special facilities for a comprehensive study of the phenomena of small-pox, and in Mr. Siljeström's essay there is science and philosophy, instead of the inadequate and catchpenny stuff current in this country as "truth about vaccination."

In Finland, the story of vaccination is much the same as in Sweden, with the difference that there was no natural subsidence of small-pox to be placed to its credit. Wherefore, as concerns Finland, it is the habit of vaccinators to preserve a discreet silence, the facts not tending to edification in the Jennerian faith.

Vaccination was introduced to Denmark at the same time as Sweden, and was made compulsory in 1810. As in Sweden, small-pox was falling off, and, as in Sweden, the vaccinators were loud in their outcry over their success; but their claim was absurd. The population of Denmark in 1801 was 925,680, and up to 1810 no more than 118,782 persons had been vaccinated, whilst the births in the same period were 283,905. It was, therefore, assumed that the vaccination of less than a tenth of the population in eight years had reduced and extinguished small-pox among the unvaccinated nine-tenths! It is clear that where there is a disposition to believe, anything may pass for credible.

Subsequently to 1801 there was little small-pox in Copenhagen, and from 1811 to 1823 not a

death from the disease was recorded; but in 1824 small-pox reappeared; and in 1835 there were 434 deaths in the city; when it began to be admitted that vaccination did not prevent small-pox, and that revaccination was necessary for complete protection; but, if requisite, how was the miraculous extinction of the disease by the primary vaccination of less than a tenth of the population in the early years of the century to be accounted for?

Iceland, as a dependency of Denmark, is often cited as evidence for the virtue of vaccination. It is admitted that the Icelanders have suffered severely from epidemics of small-pox; but it is to be remembered that the disease was epidemic, and not endemic, and that the outbreaks were often separated by many years. That similar seasons of exemption should have been enjoyed after the introduction of vaccination need not surprise us, nor be attributed to vaccination. Let us wait and see. The inhabitants of Copenhagen and Stockholm were convinced that they too were delivered from small-pox, but in due time they discovered that they had been dwelling in a fool's paradise. Moreover, it is absolutely silly to isolate small-pox as a cause of death, and disregard its correlation with other causes. It may be more offensive to die of small-pox than of some other forms of zymotic disease, but that seems the only reason for considering it specially objectionable—a reason that would not, we think, have much force with Icelanders.

From the preceding details, we see how far vaccination in Scandinavia was from answering the claim made on its behalf by Jenner and his adherents. He, it is true, died in 1823, before the more emphatic refutations of his fancy had come forth; but, as said, it is questionable whether he ever realised that the names of countries stood for millions of men, women, and children whose inoculation was a work of organised labour, only accomplished in the process of years. His various boasts, therefore, of vaccinated nations and exterminated small-pox are to be taken as proofs of defective arithmetical capacity and of that rare scientific imagination that runs with matter of fact and possibility.

EX CATHEDRÂ.

Mr. Young received the following note:—

"Horfield Rectory, Bristol, *Nov.* 8, 1881.

"The Rev. F. Bingham returns the post-card, with its *untrue* and false statements as to the liability of deaths amongst the unvaccinated from small-pox. It is a pity Mr. Young and those who have joined his Society have not the capability of understanding the immense service rendered to humanity by the practice of vaccination. Not one nurse in any small-pox hospital, who was revaccinated on entering on her duties, suffered from the disease."

It is odd that any one should take the trouble to address Mr. Young in these terms; for it is because he and his associates know that what Mr. Bingham asserts is untrue, that they labour to expose the inutility and the dangers of vaccination.

LORD CLIFTON ON REPEATED PROSECUTIONS.

THOUGH I have had a very brisk little skirmish with the Home Office, and English and Irish Local Government Boards, about sec. 31 of the English Vaccination Act, which is sec. 147 of the Irish Public Health Act, I am now convinced that the law is against us. Perhaps you will insert this admission of mine in your next INQUIRER, for the question which I got Mr. Burt to put in the House, and my own remarks on sec. 31, have drawn much attention from anti-vaccinists in many parts of the country. Mr. L. Atherley Jones has drawn up a very complete opinion on the points raised, and he is convinced that the "continuous default" and the "repeated offence" under the Act of 1867 are one and the same thing, default after a penalty constituting a fresh offence in the eye of the law, however late the guardians may be in noticing it. It seems it is not open for the parent to say, after paying a penalty for a child, that he continues to *neglect* the law, and yet does not commit a fresh offence. The law says, "If you admit neglect, you admit a fresh offence." Although the intention of the parent not to vaccinate may be continuous, it seems that each penalty constitutes a new epoch, after which the non-compliant parent reappears as "guilty of a fresh offence."

But I do not advise anti-vaccinists to despair on finding the letter of the law so firm against them. Literal law and natural equity are two very opposite things. The defeat of every attempt to circumvent the letter of the Act of 1867 ought to point out to us a new and more equitable line of defence.

The Act of 1853 authorised one full penalty and costs to an anti-vaccinist father for every babe with which his good lady might present him! Was *this* Arcadian simplicity and Utopian justice?

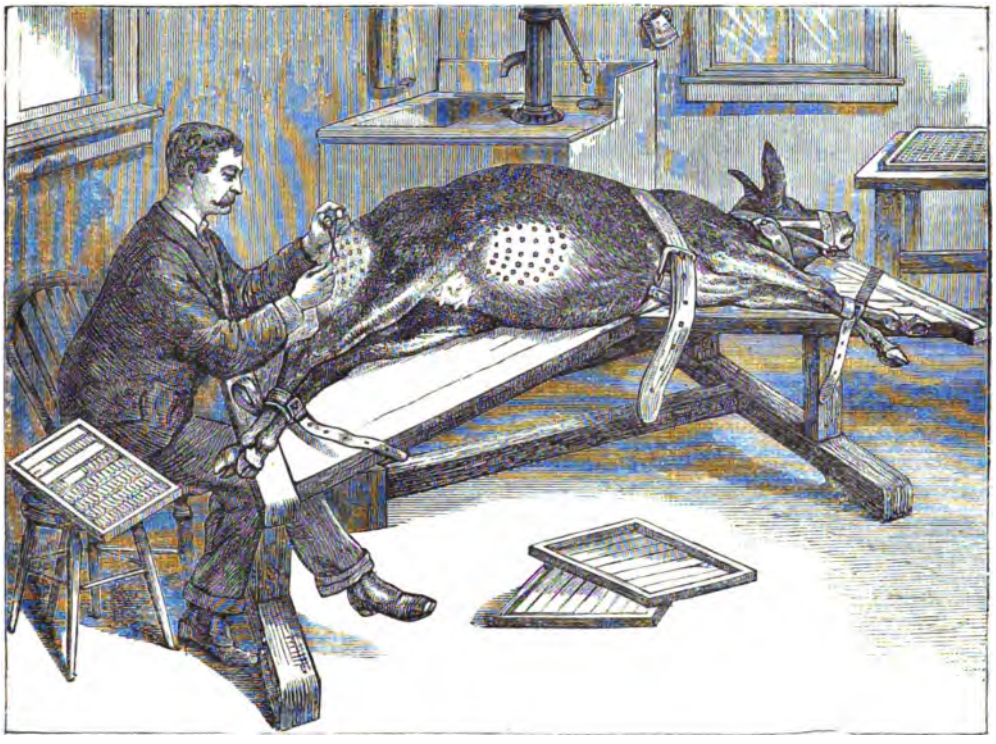
Are we to say, comparing the periods before and after 1867:—"Quam bene vivefant Saturno rege priusquam?"

Surely we ought to substitute for the miserable compromise hitherto proposed under the names of Candlish, Forster, Pease, and Dodson, the more equitable proposition that the sacred family principle be respected, and that no parent, however full his quiver may be, shall be forced against his conscience to send a single one of his children "through the fire to Moloch!" The key to the position is the words "neglect" and "offence" in sec. 29. Parental care and parental neglect are at opposite poles.

If anti-vaccinists throughout the country will present the magistrates with affidavits or affirmations of their determination to *protect* their children, the Act, which is based on a conception of stupid neglect, not of deliberate protection, will become a dead letter.

Cobham Hall, CLIFTON.
Nov. 20, 1881.

ENGLISH ARMY REGULATION.—When recruits are vaccinated, they are allowed a week off duty to recover from the effects. Some require a much longer vacation.



THE COW-POX IMPOSTURE.

THIS is not a caricature. It is a serious picture published in furtherance of the trade in Cow-Pox. It represents Dr. Stephen C. Martin, of Brookline, Massachusetts, extracting virus from the posteriors of a diseased heifer for the inoculation of credulous and ignorant Americans.

This infamous trade is pursued under cover of the authority of Edward Jenner, but falsely; for Jenner taught nothing more distinctly than that Cow-Pox was of no avail whatever against Small-Pox.

The case stands thus—

Jenner lived last century at Berkeley, in Gloucestershire; and the dairy-maids in that neighbourhood believed that if they caught Cow-Pox in milking cows, they could never afterwards catch Small-Pox.

Jenner, when a young man, was inclined to accept the dairymaids' faith; but when he discussed it with his medical acquaintance they ridiculed it.

They said, "We know that such is the dairy-maids' faith, but it is untrue; for we know dairy-maids who have had Cow-Pox, and afterwards had small-pox, in spite of their Cow-Pox."*

Jenner was convinced, and said no more about Cow-Pox.

Still, he hankered after the notion that some sort of animal pox might be brought into use as a mild substitute for the small-pox then employed for inoculation.

He tried Swine-Pox on his son, and to all appearance it answered; for when he inoculated him repeatedly with small-pox, it did not take —a proof, so he thought, that the child was fortified against small-pox.†

But somehow he was not satisfied with Swine-Pox. He wanted to make his fortune, and probably feared that the public would not hear of anything so nasty as Swine-Pox.

Toward middle-life he had what he conceived to be a happy thought. Cow-Pox as Cow-Pox he had dismissed as impracticable; but there was a variety of Cow-Pox which he resolved to recommend.

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* Baron's "Life of Jenner," vol. i., pp. 48 and 125.
† Ib., vol. i., p. 130.

Cows in Gloucestershire were milked by men as well as by women; and men would sometimes milk cows with hands foul from dressing the heels of horses afflicted with what was called *grease*. With this *grease* the dirty fellows poisoned the cows' teats, and the pox which followed was pronounced by Jenner to have all the virtue against Small-Pox which the dairy-maids claimed for Cow-Pox.

According to Jenner, then, the dairy-maids were right, and they were wrong. They were right when the pox they caught was derived from the horse through the cow; they were wrong when the pox they caught originated on the cow without the horse.

Thus Jenner discriminated a double pox—Cow-Pox of no efficacy against Small-Pox, and Horse-Grease Cow-Pox of infallible efficacy.

Further, in this connection, it is to be observed, that farriers believed that when they got poisoned in handling horses' greasy heels, they too, like the dairy-maids, were safe from Small-Pox.*

It is not therefore for Cow-Pox, but for Horse-Grease Cow-Pox that Jenner is answerable. In Cow-Pox he had not, and could have no faith.

One day taking his nephew into a stable, and showing him a horse with greasy heels, he said, "There is the source of Small-Pox."†

Not from the cow, therefore, but from the horse did Jenner derive that milder pox, which he commended to the world as a substitute for small-pox inoculation, and as a life-long defence from Small-Pox.

Nor did Jenner always care to pass the virus from the horse through the cow. He used it neat. Having received a supply of horse-grease from a pupil, he thanked him for it as "the true and genuine life-preserving fluid."‡ Numerous children were inoculated with horse-grease, and the virus conveyed from their arms to other arms; and as this virus has passed into general circulation, there must be millions equinated, who believe themselves vaccinated.

We have entered into these details to prove beyond possibility of dispute that to claim Jenner's sanction for Cow-Pox is deliberate imposture. What Jenner stands accountable for is—

HORSE-GREASE COW-POX,

and subsequently for Horse-Grease neat, or, as his followers more exactly explain, for Horse-Pox.

* Jenner's "Inquiry," pp. 26, 27.
† Baron's "Life of Jenner," vol. i., p. 135. ‡ Ib., vol. ii., p. 227.

It is notorious that Vaccination is falling into discredit. It is admitted on all sides that it does not prevent Small-Pox as originally asserted. Hence has arisen the cry for Re-Vaccination. To be effective, it is said, Vaccination must be repeated: some say every seven years; others every three years; and others annually: presently it will be prescribed twice a year, in spring and autumn.

It is said that through innumerable transmissions from arm to arm, the virus has deteriorated, and worse than deteriorated. To its original foulness it has added other foulness, even the worst of foulness, communicating a disease to which death is often preferable; so that Sir Thomas Watson, M.D., has to say:—

"I can readily sympathise with, and even applaud, a father who, with the presumed dread or misgiving in his mind, is willing to submit to multiplied judicial penalties rather than expose his child to the risk of an infection so ghastly."*

Further: some forty years ago Ceely and Badcock took it into their heads that virus for vaccination might be created by inoculating cows with small-pox. They tried and succeeded. The virus they produced was recognised as true Cow-Pox, and was accepted by Government, and passed by public vaccinators into general circulation.

Thousands of thousands have been inoculated, and continue to be inoculated with this Small-Pox Cow-Pox; and now many physicians maintain that a frightful blunder has been committed. They say that Small-Pox though passed through cows remains Small-Pox; and that those who are inoculated with it are not vaccinated, but variolated; and that Small-Pox is thereby diffused and kept alive among the people.

A striking testimony on this point was delivered by the Irish Local Government Board. The Galway Guardians in 1879 ran short of virus for vaccination, and it was proposed to raise a stock by inoculating a calf with Small-Pox.

As soon as the Board in Dublin became aware of the project, it was instantly forbidden, on the ground that such virus would communicate Small-Pox to the inoculated, and render the operator liable to prosecution for spreading the disease.

Yet this virus denounced as dangerous and illegal in Dublin is officially current from London!

* *Nineteenth Century*, June, 1878.

It is to retrieve the credit of Vaccination, thus falling into disrepute, that the Cow-Pox project has been started, with the unscientific nonsense we every day hear about resorting to "pure lymph from the calf." The project has been commended to the English public by Sir Thomas Watson, who thus describes the process:—

"A healthy and well nourished calf, about three months old, is *hired* from a butcher, and vaccinated in the usual way on its shaved abdomen in about sixty places. Upon the punctures thus made *vesicles* form, as from ordinary vaccination on the human body. These vesicles run their due course, and the vaccine virus which they contain is ripe and fit for use about the fifth or sixth day of that course—for use, namely, from the living animal in direct vaccination, and for collection in a fluid state into tubes, or in a dry state on ivory points, for the purpose of vaccination which is indirect. After seven days the calf is returned to the butcher, none the worse for what has happened."*

How the public will relish veal after such treatment remains to be seen.

Dr. Charles Cameron, M.P. for Glasgow, is the leading advocate of Cow-Pox, and has driven the Government to undertake its production and issue.

The heads of the Vaccine Department in Whitehall are without confidence in Cow-Pox; but they fear to offer too much resistance lest the public faith in Vaccination, already so shaky, should altogether disappear.

They also know that when they confessedly issue virus of two qualities, 1st and 2nd class, they will excite suspicions and difficulties of which it is impossible to foresee the results.

The situation is one of great perplexity. They hesitate to condemn the Mixed Pox in use, foul though it be, and to commit themselves unreservedly to Cow-Pox, which they are well aware is quackery.

The audacity, whether of ignorance or craft, with which Cow-Pox is recommended is almost incredible.

For example, Dr. Cameron, at the Social Science Congress in Dublin, said that in Cow-Pox they would once more possess the means wherewith Jenner wrought his wonders, and that Jenner's wonders they might confidently expect to repeat.

The answer is, that whatever wonders Jenner wrought, it was not with Cow-Pox. He knew that Cow-Pox was of no avail against Small-Pox, and because it was of no avail, he resorted to Horse-Grease and to Horse-Grease Cow-Pox.

Here is another example of similar audacity.

Dr. Martin, the American Cow-Pox Manufacturer and Contractor, appeared before the recent meeting of the British Medical Association at Ryde, and proclaimed to the doctors there assembled, that in America he had restored vaccination as practised by Jenner; adding that *his* Cow-Pox never excited erysipelas, the common curse of ordinary and degenerate vaccination.

Never excites erysipelas, does it not? Why, Jenner regarded erysipelas as one of the proofs of true and effective vaccination! In describing the inoculation received by milkers from spontaneous Cow-Pox, he says:—

"The pustules are of a much milder nature than those which arise from the contagion which constitutes the true Cow-Pox. They are always free from the bluish or livid tint so conspicuous in the pustules of that disease. *No erysipelas attends them.*

"This disease is not to be considered as similar in any respect to that of which I am treating, as it is incapable of producing any specific effect upon the human constitution.

"It is of the greatest consequence to point this out, lest the want of discrimination should occasion an idea of security from the infection of Small-Pox, which might prove delusive." *

Mark—*No erysipelas attends them!* Exactly what Martin claims for *his* pox. Thus Jenner's note of impotent Cow-Pox is set forth by Martin as a positive merit, and Jenner's name used as warrant for the defect!

Jenner never pretended that vaccination was other than an inflammation and a fever, slight perhaps, but certain; the price to be paid for exemption from Small-Pox. But now the Cow-Pox quacks assure us that even so much inconvenience may be dispensed with, whilst the security is the same. What is this but the speech from everlasting of smooth deceivers!

And here is another example of the same quackery equally wonderful.

Dr. George Wyld opened a shop for the sale of Cow-Pox in Oxford Street, London, and in a letter to the *Boston Guardian* of 26th April, 1878, he wrote:—

"The profession all over England inundate us with applications for lymph, and, with the help of God, I will succeed in silencing the

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* *Nineteenth Century*, June, 1878.

The virus thus produced, and sold on ivory points, is called calf-lymph, but *it is not calf-lymph*. It is the serum of a particular disease of the calf thrown out upon the skin. Calf-lymph is the natural fluid that circulates in the lymphatic vessels of the calf; a healthy thing, as remote from scabs as day from night. Be not deceived by wrong words.

* Jenner's "Inquiry," p. 7.

Anti-Vaccination movement, by demonstrating that if Calf-Vaccination becomes universal Small-Pox must disappear from the world."

Thus Dr. Wyld taking up Cow-Pox, rejected by Jenner, claims to accomplish with it all that Jenner failed to effect. For Jenner's failure has been decisive. Nor do we alone say so. Dr. Edward Ballard, a leading official in the Vaccine Department, Whitehall, emphatically testifies:—

"Dr. Jenner's sanguine hope that the annihilation of Small-Pox would be the final result of his practice, has not been fulfilled. Experience has not verified his prediction. Small-Pox has not been eradicated. Let me add, that scientific observation and reasoning give no countenance to the belief that it ever will be eradicated, even from civilised communities." *

Jenner introduced his Horse-Grease Cow-Pox to the world in 1798 when a man of fifty. If Cow-Pox could have served his turn, he might have proclaimed its virtue in boyhood; but then he could only have appeared as the advertiser of the fancy of certain Gloucestershire dairymaids.

Still, we must ask How can it be that this Cow-Pox (which did not protect these maids from Small-Pox, though caught in full venom from the cows) is going to save us from Small-Pox?

Some easy-going folk may say, "It is likely enough that Cow-Pox is an old dodge with a new face, but if it sets the public mind at rest, and does no harm, is it worth raising a fuss over?"

Imposture can never be harmless; but it is vain to assume the harmlessness of Cow-Pox. Cattle are subject to many diseases, and especially to Tuberculosis, which is proved to be inoculable, to be identical with human Tuberculosis, and to run its course in man with extreme virulence. Now, if we have to dread one disease more than another for prevalence and deadliness, it is Consumption; and with Cow-Pox it must inevitably be inoculated and diffused.

The fact is not questioned: it is merely said that with the exercise of due care the accident need rarely occur!

Thus Cow-Pox, although it cannot possibly save us from Small-Pox, will bear in it everywhere the possibility of Tubercular Consumption. †

Finally, we say, have nothing to do with these Poxes in any of their varieties. They belong to a time of darkness when the laws of health were ill understood. Small-Pox is one of a series of fevers attached to wretched conditions of life, which sanitary science may teach us successfully to avoid. Even if it were proved that inoculation with some variety of Animal Pox kept off Small-Pox, we should reject it as superfluous, for we have learnt a better way. Far rather should we run the risk of Small-Pox than have our blood polluted with we know not what, and in the end have no more permanent security from Small-Pox than at the beginning. *

Defence of Preceding Exposure.

Some who read the foregoing article may think the expressions made use of are stronger than courtesy warrants; but, the facts being what they are, there is little scope for courtesy. In justification of the tone assumed we reproduce some observations from the *Lancet* of 29th October, which might have been written to meet our case:—

"The profession is probably unaware of the progress steadily made by medical quackery in its diverse forms and disguises.

"There is a sentimental and mock heroic spirit abroad which burlesques the candour of 'truthfulness,' and even mimics the impulses of chivalry. We hesitate to condemn any system 'lest there should be some good in it,' and we are too tender-hearted and polite to deal honestly by its promoters, even though we recognise the fallacy of their pretensions, and more than suspect their motives. This is not a faithful line of conduct in reference to our profession, nor is it loyal to Science, which is one of the many constituent parts and aspects of Truth.

"Nothing is so much needed just now as the rise in our midst of a stern and uncompromising apostle of sincerity in Science—a man of unpitying animosity to humbug in all its forms, who will not hesitate, at any bidding, to denounce wrong-doing and untruthfulness, let who may be the offenders. It is time that a spirit of manliness went out in our ranks to chase away the lying spirit of mock courtesy—the faint-hearted and time-serving sentimentality—which makes us so ready to look kindly on any pretender, and so reluctant to expose any pretence.

"This is the only sentiment worthy of the medical profession in its dealings with medical quacks, and the time has come when the revival of its old spirit is most earnestly to be desired."

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* "On Vaccination: its Value and Alleged Dangers," p. 37.

† See "Vaccino-Tubercle" by W. J. Collins, B.Sc., M.R.C.S., in *Vaccination Inquirer*, No. 31; P. A. Taylor's Reply to Dr. Carpenter, p. 30; and "Human and Animal Variolæ," by George Fleming, F.R.C.V.S., p. 60.

* Those who would know more of the subject dealt with in this article are advised to read "The Imposture of the current Small-Pox Lymph called Vaccine, and the new Imposture of Calf-Lymph." The tract, price 2d., may be had of Mr. Wm. Young, 114 Victoria Street, Westminster.

PROFESSOR A. VOGT'S POSITIONS.

In a work now in the press, entitled "The Old and New Creeds as to Vaccination," Professor Adolf Vogt, of Berne, sets forth these positions:—

I.—That for the past fifty years all the recruits of the Prussian army have been vaccinated or re-vaccinated on joining; and that during that time 60 per cent. more deaths from small-pox have occurred in the army than among the civil population of the same age, though the latter have not been universally vaccinated, and only exceptionally re-vaccinated.

II.—That a Prussian soldier is a totally different person from an infant or a weakling, but that the orthodox medical school takes no note of this difference when it concerns liability to small-pox in connection with vaccination.

III.—That during the Franco-German war, in the German army, with identical conditions as to vaccination, twice as many privates were attacked by small-pox as officers; of the infantry, ten times as many as of the cavalry; and of the Hessian Contingent, sixty times as many as of the Wurtemberg Contingent. Wherefore the disease must be governed by influences totally different from that of successful vaccination.

IV.—That the Bavarian Contingent, notwithstanding faultless re-vaccination, had almost five times as many deaths from small-pox in the same war as the Bavarian civil population of the same age at the same time not subjected to compulsory re-vaccination.

V.—That at that time small-pox was epidemic in Germany as well as in Switzerland before one captured Frenchman had touched the soil. Wherefore the assertion by physicians that the disease was introduced by the captives does not accord with fact.

VI.—That the French prisoners in German fortresses, notwithstanding renewed vaccination on German soil, had more deaths from small-pox than the German resident troops with a protective vaccination of older date.

VII.—That the disease at that time in Germany and Switzerland took a wholly different direction from the movements of the great armies.

VIII.—That the imprisoned French in the Canton of Berne, who were many of them re-vaccinated, suffered greater mortality from small-pox than the almost wholly non-re-vaccinated Bernese population of the same age; but considerably less than the throughout re-vaccinated French prisoners in Dantzig.

IX.—That in the French army for years past, that particular corps which shows almost four times fewer cases of vaccination and re-vaccination than the rest of the army, has yet fewer cases of sickness and mortality to show from small-pox.

X.—That the youth of France of the same age, free from all compulsion as to vaccination, shows almost three times fewer cases of mortality from small-pox than the army.

XI.—That in the French army there is a greater mortality from small-pox among the newly re-vaccinated than among those whose vaccination is of older date; and that in the schools for recruits the years of most thorough-going re-vaccination are distinguished by a higher death-rate from small-pox.

XII.—That in 1829, in the kingdom of Sardinia, the re-vaccinated troops brought the small-pox from Nice to Turin; that in 1832 in Treviglio the re-vaccinated soldiers were the first to be attacked by small-pox, and to spread it; and that in 1869 in the Netherlands, small-pox emanated from the re-vaccinated troops, and was by them conveyed to distant parts.

XIII.—That the miracle of the immunity of pock-marked persons, or of the rarity of a second attack of the disease, preached by the priests of the old-fashioned vaccination creed, rests upon their ignorance of the doctrine of probabilities, which shows us that without the acceptance of any wonderful theory of immunity, the rarity of a second attack must be taken into account with regard to *all* diseases to which certain times of life exhibit a differing liability, and which appear periodically in an epidemic manner.

XIV.—That a person is perfectly secure from small-pox who has already has it, either in a natural way, or artificially by inoculation with human or bestial pox; but that of any *preservative power* when the diseased condition has passed away, we know nothing; and that the presumption of a prospective protective power is based upon ignorance.

XV.—That the temporary absence of small-pox from a country cannot be attributed to a temporary immunity produced by the morbification of the people by vaccination. This doctrine of morbification set up by the Swiss Sanitary Commission is a figment of the imagination, springing from ignorance of the history of the disease. [Morbification—*durchseuchung.*]

XVI.—That the three-and-a-half millions dying of small-pox in Old Mexico, brought forward as a bogey by the same Commission, were never counted by anyone, and, according to the reports of eye-witnesses, most of them fell victims to famine.

XVII.—That the fantastic doctrine of morbification, on which the benefit of vaccination is based, is shown by exact examination to be jugglery, by means of which the irreconcilable contradictions of the orthodox vaccination creed are sought to be concealed.

XVIII.—That the immunity from small-pox enjoyed by the conquerors of Mexico, and attributed to a previous morbification, is an invention of the Swiss Sanitary Commission; and only holds good as an argument when the spread of small-pox at the same time by the conquerors of Peru is kept out of sight.

XIX.—That in Sweden at the time of the introduction of vaccination at the beginning of this century, small-pox was steadily subsiding, which, however, was not the case in Finland, although that country was in receipt of the same blessing. The Swiss Commission relate that small-pox vanished from Sweden with the first introduction of vaccination; but are discreetly silent about Finland.

XX.—That in Sweden, the classic model-illustration of the blessings of vaccination, small-pox has for several decades been again on the increase, as also in England, Prussia, the Canton of Zurich, &c.

XXI.—That the ancient Arabian superstition, that "everyone must have small-pox once in his life," was formulated as a dogma by the inoculators of the last century, and is perpetuated by the vaccinators of to-day, in order by terrorism to maintain compulsory laws for their own advantage.

XXII.—That according to the incomparable statistical logic of which the orthodox small-pox statistician avails himself, one single "homœopathic varioloid poisoning with vaccine" proves more protective than actual human small-pox; that, therefore, a still further dilution of the protective lymph, until it loses active power, or a still less frequent vaccination than once in a lifetime, would justify the strongest hope of finally rooting out the disease.

XXIII.—That in Italy, three years before the first attempts at Vaccination, and nine years before its introduction into the country, small-pox was beginning to disappear, and continued to diminish for thirty-one years, and that the vaccinators represented and claimed this phenomenon as the result of their operations.

XXIV.—That in the small-pox epidemic of 1829 in the Kingdom of Sardinia, no parallel could be drawn between the condition of the people as regarded vaccination, and their illness, recovery, or death from small-pox.

XXV.—That in the same country, from 1824 to 1848, vaccination was more and more neglected, and yet small-pox never again reached the height of 1829.

XXVI.—That in the eight years, 1866-75, Prussia, with its compulsory vaccination laws, exhibited a higher death-rate from small-pox than Holland during the same period, though Holland was much more negligently vaccinated, and then without a vaccination law.

XXVII.—That in Scotland and Bavaria, where during the first six and the first fifteen months of life respectively vaccination is compulsory, mortality from small-pox in the first years of life greatly exceeds the small-pox mortality of the later years of childhood in the case of the Netherlands, where vaccination is generally performed at a later period of the child's life; at which period, however, a strikingly high death-rate from small-pox is observable.

XXVIII.—That the Dutch provinces which showed the highest number of vaccinations in 1870, had in 1871 the highest small-pox mortality.

XXIX.—That the different races living in Holland, under almost identical conditions as to vaccination, show a fivefold difference in the death-rate from small-pox.

XXX.—That the half of Holland which is most thickly populated has a death-rate from small-pox four times as large as that of the more thinly populated half, though the conditions as regards vaccination differ in no essential respect.

XXXI.—That in those divisions of Holland in which the population is three times as dense as in the other divisions, the small-pox death-rate during the last severe epidemic was four to five times higher; and that density of population alone exercises an infinitely greater influence upon the disease than vaccination does.

XXXII.—That at all times and in all places, *the conditions and habits of life*—in a word, the social position of the people in question—influences the spread and intensity of most diseases, and specially of small-pox; and that vaccination has no such influence.

XXXIII.—That it testifies to incapacity for logical thought to bring two facts such as varioloid disease and vaccination into causal connection when they as often contradict as affirm each other.

XXXIV.—That the dogma of vaccination represents the pure negation of Epidemiology and Hygiène.

Having in my pamphlet proved these positions, I leave to those in authority the responsibility of laws which compel every citizen, at his own cost, and without any compensation in case of injury, to subject his children to an operation as to the dangers of which there is no longer any doubt, and as to the benefit of which physicians themselves know nothing. A. VOGT.

Animam meam salvavi!

MEDICAL DISTRUST.

[THE apparent enthusiasm of medical men in favour of vaccination is largely factitious. There is much apathy, much scepticism, and much positive disbelief and contempt among them concerning the practice, as will be abundantly manifest when the trade union tyranny connected with the prescription becomes relaxed. Since the publication of Mr. P. A. Taylor's Reply to Dr. Carpenter, he has been the recipient of many medical confidences and congratulations, and the following passages from a letter addressed to him by an eminent country practitioner represent convictions widely entertained.]

It is evident you have at heart a thorough criticism of the merits of vaccination; and that criticism in the presence of unmitigated epidemics of small-pox should have been so long *one sided* confirms the historic truth that a faith *once established* will long hold its own against facts directly opposing. I am not on the rolls of an anti-vaccination league, nor do I say vaccination has not a mitigative effect on small-pox, but after twenty years of experience as a Public Vaccinator, and forty years of extensive public and private practice, I entertain great doubts on the point. I have seen many of the very worst cases of confluent small-pox after typical vaccination and re-vaccination, and very mild cases and exemptions without vaccination. I can speak positively, from overwhelming evidence in my own practice and that of others, of frequent evil results from vaccination—such as inveterate eczema and glandular enlargements. If any medical man should deny such consequences of vaccination, he must be prepared to deny that teething and other irritations are fraught with danger to the quick susceptibilities of infantile life. Vaccination is a disturbing cause, frequently more so than measles, and much more so than ordinary dentition. Yet to a scrofulous child, or a child of delicate parents, measles and dentition, in themselves and their sequences, are rightly regarded as stages of serious danger. How, then, can the disturbance of vaccination be without its secondary dangers? How can it fail to irritate and light up (as it often does) any latent disease in the child's constitution?

I do not believe "Cow-Pox" and Small-Pox to be modified forms of one disease. Small-pox attacks equally male and female of the human species; but whoever heard of Bull-pox? If the diseases were identical, *how could* only one sex of the bovine family be affected by the epizootic? The great fact of repeated epidemics of small-pox sweeping the country, unstayed by the most assiduous vaccination, was lately sought to be met by vaccination from the calf. It was advanced as a theory, that interminable transmissions had altered the protective character of the lymph; but it is not found that the virus of small-pox is altered by transmission, nor that of scarlet fever, nor of measles, nor of any other propagable malady.

I refuse to believe in statistics as against palpable facts. Is it likely, Sir, that whilst ninety-nine in a hundred of public vaccinators are *necessitous men*, and take vaccination appointments to weave out their thread-bare living, that they allow many children to escape? I have seen with disgust wretched, ricketty, blear-eyed children pressed relentlessly into this medical service.

Let us see how the law stands in relation to such cases. A child, however diseased or idiotic, must be *certified* as unfit for vaccination; and this certificate must be *repeated every two months during the lifetime of the child.* The registrar sends a sharp official notice to the parents if the certificate be not furnished in due time; so that at last the parents or guardians, weary of the trouble and expense, surrender the wretched child to the demanded operation.

The cruelty is, no doubt, unintended. The law was made by enthusiasts who could not foresee the details of its working; and it is carried out by men who make each case contribute a fraction to their necessities, with savage energy.

As to the authorities, that is men holding in one form or other vaccination appointments under the Government, or Poor Law Guardians, how can they be expected to give disinterested opinions? An epidemic of small-pox breaks out in a certain locality, and an Inspector is sent to examine the arms of the afflicted. A great number of those who have suffered he pronounces *imperfectly vaccinated.* If they have vaccine scars in one arm, he will probably say they should have been vaccinated on both arms. His verdict is always against the *mode*, never against vaccination; but a just censor might fairly refer to the Vaccinating Officer's official report to the Board of Guardians, and he will certainly find the words "Successfully Vaccinated" recorded against the name of the child whose vaccination the Inspector has condemned.

Why should vaccination require several scars when hydrophobia, the virus of the snake, of syphilis, &c., do their mischief with one? The "marks" doctrine is a quibble, which, in the present condition of the public mind, serves the interest of those involved in the delusion.

Small-pox is unquestionably less virulent than formerly; but then domestic hygiene and food are better. Medical men, habitually engaged in acts of kindness, are, as a rule, superior to their fellows; but monetary necessity presses heavily on the mass of them, and if 2s. 6d. were offered for each successful case of vaccination, and 3s. 6d. for each successful case of small-pox, believe me, Sir, they would soon testify emphatically to the superiority of the latter.

I have no interest whatever in this matter, beyond the conviction that the law enforcing vaccination is severe out of all proportion to the benefit it confers.

INFORMATION EXTRAORDINARY.—In the *Manchester Guardian* of Nov. 12 there was a notice of the death of Baroness Dimsdale, and an account of the Dimsdale family, wherein it was related that Dr. Dimsdale was a friend of Dr. Jenner, that he recognised the inestimable value of vaccination, and was dispatched to Russia in 1762 to vaccinate the Empress Catherine. In 1762 Jenner was a lad of thirteen, and vaccination unpublished. Dimsdale was a small-pox inoculator, and had played his part and gone into retirement long ere Jenner came upon the scene.

DR. GARTH WILKINSON is loved of many readers, to whom his every word is precious. He has just written a short paper entitled "Pasteur and Jenner: An Example and a Warning," in which the case against the new inoculation is set forth with graphic power. Copies may be had of Mr. William Young, 114, Victoria-street, S.W., price 1d.

SMALL-POX IN AUSTRALIA.—Our friend, Mr. J. M. Newnham, who recently sailed for Australia, and whose address is now Omega Retreat, Kiama, Sydney, writes:—"I had a splendid voyage, and went ashore at Adelaide, where the first thing I saw was a poster, in red and black, with Small-Pox, Vaccination and Re-Vaccination in big letters, and the common stock fables in smaller type, which stirred up my wrath. 'Persecution makes a wise man mad,' and of persecution I know something. Everybody seemed afraid, because small-pox had been brought to Sydney by the Chinese, and the English in Sydney caught small-pox because they had not been vaccinated. Most medical men in Australia have never seen a case of small-pox, but when I surveyed the back streets of Sydney, it seemed to me that quarters were ready for the disease. The scare in Sydney was indescribable, and great barbarity was practised on the afflicted and those who came in contact with them. Nothing is so merciless as terror. The doctors who visited small-pox patients were put in quarantine, which was logical and grand. Now reaction has set in, and the people are ashamed of themselves, and confess their folly. The *Sydney Herald* has done good service in assisting the recovery of sanity, and has published the truth bravely. The doctors are contradicting each other furiously, and in their conflict the public receive many instructive lessons. As at home, when the small-pox was prevalent, the death-rate fell below the average; so that, as I kept saying, 'You are most afraid of death when there is the least death to be afraid of.'"

MR. JOHN SAVAGE, of Kinsale, is entitled to sympathy as one of the most persecuted of anti-vaccinators. Summoned and fined over and over again, he remains indomitable, poor man though he be, and punishes his cowardly aggressors severely. During the hearing of his last summons, he cited the case of a sorely-afflicted child, certified as successfully vaccinated by Dr. Dorman, and was denounced in the open court as a liar by Dr. Dorman. Well—the liar in the case was *not* Mr. Savage. Subsequently he applied for a summons against the Doctor for abusive language, which was refused. Had Savage described Dorman in similar terms, there would have been no hesitation; but such is justice!

SPEECH OF DR. HUBERT BOËNS,

(President of the Second International Anti-Vaccination Congress at the close of the meetings at Cologne, Oct. 12, 1881).

HONOURED COLLEAGUES,—Summing up the results of this brilliant session, we observe that a fact of the greatest importance has been firmly established—namely, that *vaccine* is an unhealthy excretion, a product from which Nature is striving to set the body free, a germ or originator of disease. So far from being the innocent blessing which the believers in Jenner pretend when they use their time-honoured formula: "If it does you no good, it will do you no harm," it has been proved by your untiring researches that, on the contrary, it can do no good, and may do much harm. Messrs. Dudgeon, Schoppe, and many others have definitively established truths which, thanks to our International Association, will soon make the circuit of the civilised world. Vaccine is injurious to health, not only of itself, but by the excitation and induction of other diseases. In Germany and England the number of newly-vaccinated infants perishing at the outset of life may be counted by thousands, and the same fatality will be detected in the Latin countries as soon as observation is brought to bear.

In their mischievous effects, the vaccine lymphs are alike, whether obtained from children or from calves. The one is too often taken from the classes subject to syphilis and scrofula, the once-dreaded "king's evil;" the other is specially liable to convey lung-complaint; and the peculiar morbid phenomena excited in the vaccinated patients is the compound result of whatever disease exists in their constitution, and the special fermentation caused by the addition of the vaccine complaint. Verde de Lisle, Ancelon, Carnot, and others have statistically shown that universal vaccination bodes universal deterioration of the human species; that it augments the mortality of infancy and youth; that it has doubled the deaths in the military hospitals; increased the number and fatality of small-pox epidemics; and rendered its adherents specially subject to diseases of a typhoid character. In short, the more a nation is vaccinated, the more it will suffer from each zymotic epidemic, and the more rapid will be its physical decline.

Pardon me for omitting to particularise the long roll of intelligent and learned men who have contributed such valuable documentary evidences —the Oidtmanns, the Vogts, the Bakers, and the Tebbs now present among us, and the equally ardent supporters of intellectual freedom in civilised Europe, whose best wishes are accompanying our efforts. And here I am sure I shall offend no legitimate *amour-propre*, when, among all the distinguished chiefs of the devoted band now engaged in the more than benedictine duty of attacking the vaccine superstition, I name one whose modesty is equal to his knowledge, who speaks little and thinks and writes much—the able statistician Lohnert.

The second fact, and one of remarkable importance, which we have incontestably acquired, and which the vaccine supporters are unable statistically to disprove, is that vaccine lymph—be its origin what it will—is powerless to protect against the small-pox. The statistical figures collected from the old and the new world by Messrs Oidtmann, Vogt, Lohnert, Newman, Siljeström, and numerous other investigators, are indubitable proofs of the accuracy of this assertion.

Vaccinators themselves are gradually losing confidence in their earlier beliefs. Originally they undertook to defend for life; subsequently the limit was narrowed to twenty, to fifteen, and even to ten years. To-day there are sincere believers to be met with who reduce the immunity to one year. Even this short period is incapable of proof, for it is the sanitary conditions which accompany the application of the vaccine, the strict observation and application of the eternal laws of health, that are the sole agents in procuring immunity from small-pox and epidemic maladies in general.

You have also clearly demonstrated a third fact: that small-pox is by no means so dangerous and unmanageable as is generally taught. Much has been due to improper treatment, but vaccinators have made a stalking-horse of its sensational terrors, in order to frighten a timid and uncritical world into the reception of their blessing. Small-pox is not the wild and untamable scourge that legislators are so apt to imagine. We have cited remarkable examples of small-pox epidemics stopped in full swing or checked in the very outbreak by the application of the only valid preservatives, the agents which the genuine science of health has placed at our disposal.

Large sums of money are annually paid to the vaccine profession, not only for the operation, but for attendance on its consequences; and whether the patient recovers, or whether he dies, the result is the same; gratuities and honorary distinctions to the profession are unchecked and continuous. In this point of view the proposition of our esteemed coadjutor, Dr. Pigeon, is of high importance. It supplies us with a new weapon in the social struggle which we have undertaken with a disinterestedness which has no equal and a determination which cannot be suppressed.

The vaccinator in his office is not treating a sick man; he is assuring an individual that the operation will prevent him from suffering from a particular disease. But if, instead of preserving him from illness, the vaccinator makes him ill, is not the act one for which some person ought to be rendered accountable? When a limb is injured, purposely or accidentally, in man or beast, the law provides redress; and why should the vaccinator be specially exempted from responsibility in cases of injury to the patient? The question answers itself. But on whom ought the responsibility to fall? In countries where freedom reigns, it is the operator who ought to be held responsible for injurious consequences, but where vaccination is compulsory, the State itself ought to recompense the sufferer.

Finally, science is on our side, facts are in our favour, and public opinion will range itself under our banners as soon as the responsibility of the vaccinator is properly established and enacted. The press will not be able to stifle our arguments much longer. The current of anti-vaccine opinion is one of those that become irresistible. Our thanks are especially due to Germany, for it is to the admirable researches of its learned

men that the escape of the Latin nations from compulsion is due. But observe the anomaly: the German Government interdicts the practice of vaccination in the case of animals, and compels it, under pain of fine and imprisonment, in the case of men. In France, it is exactly the contrary; compulsion is not for men, but for beasts. Thus you, distinguished *savans* of Germany now present, who have enabled us by your extensive inquiries and proofs to relieve ourselves from a threatened compulsory law, you yourselves submit to be treated as France treats its beasts. (Loud applause.)

Let us now, in full union of mind and determination, devote all our powers to the extinction of that leper of infancy, Vaccine. Let our motto be, Perfect freedom to submit or refuse, and the legal responsibility of the vaccinator.

LETTERS RELATING TO THE COLOGNE CONGRESS.

From DR. J. EMERY CODERRE, Professor of Materia Medica, Victoria University, Montreal.

Montreal, *Aug.* 23, 1881.

DEAR SIR,—I do not see any possibility of Canada being represented at the Congress. You may count on my sympathy with your efforts. Distrust in vaccination is growing in Canada. We have few cases of small-pox (vaccination not being compulsory in Canada), but in London, small-pox continues to increase, notwithstanding vaccination. Men impose practices which reason cannot justify. The notion of introducing a purulent virus into the human system is so revolting to physiological science, that it is surprising more caution has not been exercised in adopting it. It would not have been so, I feel sure, had not the necessities of medical men prejudiced their minds against the truth. I do not believe that vaccination has ever been practised with a serious conviction of its advantages—not even by Jenner himself.

Yours very faithfully.

Wm. Tebb, Esq. J. EMERY CODERRE.

From HENRY BERGH, Esq., President of the American Society for the Prevention of Cruelty to Animals. "New York, *Oct.* 3, 1881.

"Dear Sir,—I have received your card, inviting my co-operation in your movement against vaccination; but it is too late for me to do more than to express my entire sympathy with you, and my utter abhorrence of the foul and fatal system of inoculating a healthy body with the poisonous mucus of a diseased one. That scrofula, consumption, and other hereditary diseases result from that senseless and unnatural practice, I am completely convinced; and how any thoughtful parent can ever be induced to allow his babe, fresh from the hands of its Creator, to be impregnated by a disgusting virus, surpasses belief. What dreadful wrongs *Science*, in the name of vaccination and vivisection, has inflicted on animal life! With great respect,

HENRY BERGH.

[Some other letters and documents connected with the Congress we are compelled to hold over until next month.]

MR. W. H. NORMAN writes to Mr. P. A. Taylor:—"Having been vaccinated five times, and having had small-pox thrice—the last attack being the most virulent—I am, of course, firmly persuaded of the inutility of vaccination."

THE VACCINATION QUESTION RECONSIDERED.

SUCH is the title of an article in the *Journal of Science*, for November, dealing with Mr. Taylor's reply to Dr. Carpenter. The writer is evidently new to the subject, and has not fully mastered its bearing, and is undecided as to the main issue. He admits that "Mr. Taylor has made out a case, if not for the abolition of compulsion, at least for broader and more thorough inquiry; for in a matter of such importance we cannot afford to remain in the dark." Referring to the admitted increase of infantile syphilis concurrently with vaccination, he observes:—

"Dr. Carpenter seeks to set aside these grim facts in a manner which we must decline to characterise. He contends that as we do not refuse to drink water because it may contain lead, so we should not refuse to be vaccinated because the lymph may contain the syphilitic virus! He forgets that it is easy to detect lead in water, whilst to discover the presence of syphilitic poison in vaccine is an unsolved problem. Further, not one nor a hundred glasses of plumbiferous water would establish hopeless lead-poisoning, whilst one minute particle of syphilitic virus introduced to the system may defy elimination. Lastly, even a fatal case of lead-poisoning is of much less consequence to society than a case of the transmission of syphilis. The former evil cannot be communicated by the victim to others. Nor must it be forgotten how greatly the danger is multiplied by the modern plan of repeated vaccination."

The reviewer is at fault in saying that "both Mr. Taylor and Dr. Cameron agree that vaccination, as now performed, falls very far short of giving complete protection, and that such protection is gradually decreasing." Mr. Taylor, we think, would dispute the reality of any protection whatever; and Dr. Cameron's notion of a gradually decreasing protection is due to his ignorance of the conditions and results of vaccination as practised in Jenner's lifetime.

HAVE YOUR CHOICE, GENTLEMEN.

Small-pox is the most contagious of diseases.—*National Health Society's Tract on Small-pox.*

I look upon Scarlet Fever, as the most infectious disease that there is.—*Marson's Evidence*, 1871.

Typhus is at once the most contagious and most easily preventible of diseases.—*Norman Kerr, M.D., in British Medical Journal*, Nov. 12, 1881.

WILLIAM A. GUY, M.D., F.R.S., will read a paper entitled, "Two Hundred and Fifty Years of Small-pox in England," during the current session of the Statistical Society.

EASTBOURNE.—We have had a lively time here lately, and hope we have been the means of enlightening many on the question of vaccination. My own and my brother's goods were distrained and sold, and we immediately arranged a demonstration which paraded the principal parts of the town, followed by about a thousand spectators, chiefly sympathisers. I have come to the determination never to pay another penny by way of fine voluntarily, and on every occasion when the penalty is exacted to get up a similar demonstration. You should do likewise in London.—PHILIP LUCK.

MR. WHEELER AND DR. EASBY.

SMALL-POX BEFORE VACCINATION.

Date.	Authority.	Cases.	Vaccinated.	Deaths	Deaths per cent.
1723	Dr. Jurin quoted by Dr. Duvillard	18,066	None	2,986	16·53
1746–63	London Small-pox Hospital	6,456	Do.	1,634	25·30
1763	Lambert, quoted by Duvillard	72	Do.	15	20·8
1779	Rees' Cyclopædia	400	Do.	72	18·0
		24,994		4,707	18·83

SMALL-POX AFTER VACCINATION.

1836–51	Mr. Marson's Hospital Report	5,652	3,094	1,129	19·97
1870–72	Metropolitan Hospitals ...	14,808	11,174	2,764	18·66
1876	Ditto	1,470	.....	338	23·0
1871–77	Homerton Hospital (Dr. Gayton)	5,479	4,236	1,065	19·43
1876–80	Dublin Hospital (Dr. Grimshaw)	2,404	1,956	523	21·7
1876–80	Metropolitan (Jebb)	15,171	11,412	2,677	17·6
		44,984	31,872	8,496	18·8

A lengthy discussion on vaccination went on in the *Newcastle Weekly Chronicle*, until stopped by the Editor (out of concern for his readers' patience) at a point which left Mr. Wheeler subject to an unjust imputation from Dr. Easby. Mr. Wheeler had cited his comparative tables of Small-pox before and after Vaccination, which Dr. Easby ascribed to Mr. Wheeler's ingenuity, whereon Mr. Wheeler appealed to him as follows:—

Darlington, Oct. 16, 1881.

SIR,—In your communication to the *Newcastle Chronicle* you say:—

"The mortality in the Rotherhithe case . . . *is better evidence than the Table at the end of Mr. Wheeler's letter, which gives his own figures, and not those of the individuals he quotes.*"

This is absolutely false, and I write to know if you are prepared to publicly withdraw the part underlined.

I shall not pass by a statement so utterly untrue, and as the columns of the paper are closed to further communications, I await your reply.

ALEXANDER WHEELER.

March, Cambs, Oct. 18, 1881.

SIR,—I do not receive my *Newcastle Chronicle* until the end of the week, and as I have not yet seen the letter, I am not prepared to say what I may do. It was written late at night, and hurriedly, to catch the post, so that if I have said anything in it that I may consider not true, I will withdraw it; if not, I shall entirely decline. I am surprised to find you so thin-skinned. People who enter into a paper war must be prepared for a hard hit or two.

W. EASBY.

Darlington, Oct. 31, 1881.

SIR,—Having waited to see if anything appeared in the *Newcastle Chronicle*, I have again to ask you to withdraw the statement you made, and which I objected to.

You have had abundant time to prove that my Table was perfectly accurate, and it is due as much to your profession as to me to acknowledge it.

ALEX. WHEELER.

March, Nov. 3, 1881.

SIR,—I have not the abundant time you seem to think I have, or I would have replied to your letter sooner.

The paragraph you refer to would seem to infer that you had manufactured the figures. This I did not mean to insinuate, and certainly withdraw that part of it. By a system of manipulation such as your rendering of Marston's [*sic*] Tables, the authorities you quote can be made to give the results you arrive at. Dr. Gayton tells another story, and his well and badly-vaccinated cases give very different tables of mortality. W. EASBY.

Darlington, Nov. 6, 1881.

SIR,—I am in receipt of yours of the 3rd, and am sending the correspondence to the VACCINATION INQUIRER for publication.

ALEX. WHEELER.

March, Nov. 7, 1881.

DEAR SIR,—I haste to reply to your letter of to-day, so that you may publish this, if you wish, in that refuge for distressed anti-vaccinators, the INQUIRER.

I have written nothing that I am ashamed of, whereas you, in common with most others of the Anti-Vaccination League, first tell the people that the statements of the medical profession are not to be relied upon, and then proceed to quote their figures as evidence, more especially if you can turn their figures to your own advantage. I flatter myself I had the best of the correspondence, and I publicly challenged the anti-vaccination writers to produce to me publicly or privately a case of disease following vaccination; and what is the result? *Not one appeared.* Common sense and scientific evidence are against you, and all you can produce are, first, mutilated statistics; second, alleged statements of communicated disease that would not bear investigation. W. EASBY, M.D.

Darlington, Nov. 8, 1881.

SIR,—Your letter considerably surprises me.

In the correspondence you refer to, you said that which was, as I pointed out to you, absolutely false. This you have now withdrawn, allowing your withdrawal to be made public.

And if you still think you have written nothing that you need be ashamed of, I must beg leave to differ, and leave it to others to decide between us.

ALEX. WHEELER.

March, Nov. 9, 1881.

DEAR SIR,—I quite agree with you in publishing the correspondence, and I have no doubt but that you will get all the sympathy in the VACCINATION INQUIRER, and I all the abuse. I have no doubt the distinguished Editor will do me special justice in a little of something extra-spiced, and send me a copy of the paper, postage paid.

I never wrote anything false, neither have I withdrawn anything nor allowed it to be made public. This is a liberty you have taken without consulting me. You are quite welcome to do it, for it may please you and will certainly amuse me.

The figures you quoted in your last letter to the *Newcastle Chronicle* certainly favour your side of

the question, but can you honestly say that any impartial person, after reading those authorities, can give the same? With this I leave you, hoping the next time you enter into a correspondence you will show less animus than you have done in this.
—Yours very truly, W. EASBY.

THE RYDE MEETING.

I FEAR it may be gathered from the reports in the VACCINATION INQUIRER that the sophistries of Dr. Martin and other leading provaccinators were allowed to pass unchallenged at the meeting of the British Medical Association at Ryde. This, however, was by no means the case; as I myself laid the whole matter before them, and was heard with reasonable attention by the meeting.

It is true that an appearance of unanimity was given to the motion carried, by the abstention from voting of those who had spoken in opposition; but this was on the understanding that the Public Health Section had no power to memorialise the Local Government Board; nor has any memorial on the subject of vaccination ever been forwarded to the Government which has received the sanction of a general meeting of the Association.

In good truth, many of the members are now beginning to open their eyes to the manner in which they have been deceived, and are heartily ashamed of the trash which is frequently put forward in their name. At the same time, it cannot be denied that they are also ashamed to confess defeat, and still endeavour to keep up the old system of "Boycotting" those who are willing to tell the public the whole truth.

Give them a little time, and you will soon see a mighty change come o'er the spirit of their dream. EDWARD HAUGHTON, M.D.

Spring-grove, Upper Norwood, Nov. 12, 1881.

THE ZETETICAL SOCIETY is acquiring distinction as one of the most liberal and well-conducted debating societies in London; and has recently removed to excellent quarters at 9, Conduit-street, Regent-street. We are glad to see vaccination on the programme of the current session, Mr. Wm. White being set down for a lecture on March 8, entitled, "How will you have it? or, with what shall you be vaccinated?"

ANTI-VACCINATION IN THE NETHERLANDS. — The annual meeting of the Anti-Compulsory Vaccination League was held in Amsterdam on Nov. 4, Mr. Keuchenius, M.P., in the chair. The League now consists of upwards of five hundred members resident over Holland. Owing to a misunderstanding as to dates, no Dutch representatives were present at the Cologne Congress, but next year an adequate delegation will appear at Berlin. The Dutch League bases its action chiefly on the injustice of interference with civil, personal, and conscientious rights, and the members are not held to disapprove of vaccination in itself. The executive of the League consist of Mr. L. W. Keuchenius, M.P. at the Hague, Professor D. P. D. Fabius, Dr. P. G. Datema, Dr. A. J. W. Monnik, Professor Dr. Ph. J. Hoedemaker, Rev. L. Lindeboom, A. Baron van Dedem, Mr. Th. à Th. van der Hoop van Slochteren, Rev. H. Pierson, and J. Floorp, secretary.

MURDER BY LAW.

ANOTHER is added to "the cloud of witnesses" to the curse, vaccination.

Near the Old Gore resides Policeman Morgan and his wife, a remarkably healthy couple. They have five children, robust and well developed. About five months ago an infant was born to them, fair and fine, promising to equal its predecessors. But near a fortnight ago it was carried to Ross and vaccinated. It is right to say that it was not operated upon by the public vaccinator, Dr. Bramhall, but by his assistant, or partner, who is continually decrying vaccination. Pity that his practice and his sentiments do not agree.

In nine days the crisis arrived and brought on convulsions. The doctor came, and was so alarmed that he gave the child a hot bath himself, as the mother was then unable. But not hot water, or hot anything, could undo the mischief done. In about thirty hours, the child died in a convulsive fit, after suffering fearful agony. As soon as it was dead, the vaccinated arm turned black, and the whole body was soon black all over—worse, putrid through and through, so that a coffin had to be hurriedly made, lest the wretched remains should not hold together. The doctor was upbraided by father and mother: "You have killed our child with your vaccination." He said it was nothing of the sort; the vaccination had nothing to do with it. Of course not. Only get a doctor face to face with the evils of vaccination, and he lies audaciously, whether in public or private.

Let this doctor say what made every drop of this child's blood putrid, but the putrid animal matter he or his substitute put into it. Let him state what caused the convulsions to come on nine days after vaccination, in the case of a previously healthy child. All who know the case and know the parents are quite satisfied; though the doctor may swear himself black as his victim, no one will believe him.

How long, O Lord, shall medical despots "do iniquity by law?"

How long, O Lord, shall the poor of thy people be trampled down, their infants polluted or slaughtered, and the righteous remain powerless?

W. GIBSON WARD.

Perriston Towers, Ross.

The foregoing communication was addressed by Mr. Ward to the *Ross Gazette*, but the Editor returned it, saying:—

"We cannot publish your letter. The case is one that demands inquiry, but *not* in the columns of the *Ross Gazette*."

Why not in the *Ross Gazette*? Is the truth so very disagreeable that it cannot be published?

ROCHDALE.—There is an epidemic of small-pox in Rochdale—120 cases in ninety houses—and the alarm is extreme. Yet in Rochdale for several years past vaccination has been practically universal, 96¼ per cent. of the children born being certified as vaccinated. Is it not wonderful? Vaccination must have lost its power indeed. In Jenner's days it was sufficient to vaccinate 5 or 6 per cent. of the inhabitants of a town in order to exterminate small-pox, and now not 96¼ per cent. is effective!

MR. ENOCH ROBINSON, M.R.C.S.—Mr. Robinson is a member of the Board of Guardians, Ashton-under-Lyne, and with kindly firmness maintains the standard of truth as to small-pox and vaccination. In the *Ashton Reporter*, of Nov. 19, we read:—"The Ashton Board of Guardians is in a bad way. It has on it a doctor too many or a doctor too few for its peace of mind on the subject of vaccination. They could agree well enough among themselves if it were not for Dr. Robinson. A let of laymen could lay down the law and gospel on the question with unfaltering dogmatism and full assurance of their own infallibility; but when an anti-vaccinating doctor comes in amongst them, they are obliged to say "mum," to confess that they cannot argue with him, and to express an unutterable longing that some part of the district would send to the Board a qualified medical practitioner, with strong views on the question of vaccination, in order that he might argue the point with the redoubtable doctor from Dukinfield. The Guardians echo the sentiment—

A skilful leech is better far
Than half a score of men of war.

They have plenty of pugnacious men of war on the Board, but they want another skilful leech. But how would the business of the Board ever get done if the desiderated doctor should turn up and the discussion on vaccination go on from week to week, like the tales in the *Reporter*, always 'to be continued in our next,' until one of the doctors confessed himself vanquished?"

DR. FOWLER, speaking at the City of London Union, on Nov. 8, said, "It is admitted in the medical profession that the virulence of small-pox has greatly increased." Indeed! We usually hear that vaccination has made small-pox milder—ever so much milder!

"HOW BABY WAS KILLED."—This useful and touching story, issued by the London Society, has been honoured with the publication of a parody, entitled, "How Baby was saved," by Messrs. Cassell and Co. The parody is a wooden affair, overcharged with medical quackery; but it may do good by directing attention to the genuine narrative, which is read with avidity wherever circulated. The true tale is verified in common experience, and gives reason and courage for the steadfast resistance of wise and loving parents to the pollution of their children's blood.

MR. THOMAS STRAIN.—We read that the Belfast Guardians have directed their solicitor to prosecute Mr. Strain weekly until he submits his child to vaccination. We question the practicability of so much vengeance; but what an instructive commentary is the threat upon Lord Walsingham's assurance to Mr. Young, that "it was in no degree the intention of the Vaccination Act that prosecution in any case of conscientious objection should be carried to the extent of persecution!" It is under amiable imbecility like that of Lord Walsingham's that much infamous legislation is perpetrated; and when the mischief is done, the gentle enthusiasts say, "We never imagined it would have been possible. We are very sorry, fer it cannot now be helped."

MR. AMOS BOOTH AT ASHBY.—Mr. Booth made his first appearance at the Ashby Police Court on 28th October, when he represented two members of the National Anti-Compulsory Vaccination League. Major Mowbray, the presiding magistrate, objected to Mr. Booth's claim to represent the defendants, on the ground that, not being a solicitor, he had no *locus standi*. This objection was quickly disposed of by Mr. Booth, who called attention to the section of the Act empowering the appearance of any person authorised by a defendant. This little skirmish over, Major Mowbray retired from the bench, he being a member of the Board of Guardians, the prosecuting body. The Vaccination Officer, having given evidence as to the service of the notices, was cross-examined by Mr. Booth, who, having succeeded in eliciting the fact that the instructions of the Local Government Board had not been properly carried out, applied for a dismissal of the summonses, with costs. Though he had some difficulty in convincing the sitting magistrate (Mr. H. E. Smith) and the clerk, they ultimately surrendered to the authorities supplied by Mr. Booth. Accordingly, they dismissed the cases, though they declined to grant expenses to the defendants and their representative, but saddled the prosecution with the costs. It was extremely amusing to mark the ease and dexterity with which Mr. Booth handled the case; and very refreshing to watch the confutation and confusion of "the powers that be" by a gentleman who, whatever else he may or may not be, does not claim to be a solicitor.—*Leicester Town Crier.*

DR. EASTWOOD, at a recent meeting of the Darlington Rural Sanitary Authority, observed that they all knew, notwithstanding the ravings of a few fanatics, that small-pox was now a different disease from what it was before vaccination was introduced, and that a great many lives were saved every year in consequence of vaccination. Such is medical talk addressed to the vulgar! Dr. Eastwood knows very well that small-pox is unchanged by vaccination; and if asked for proof that vaccination has saved many lives, would have to own that he had none.

WISER, PERHAPS, THAN SHE APPEARED.—The *Sydney Bulletin* says a city medico tells this story. A girl from Elizabeth Bay came to him with her mother to be vaccinated, and was terribly nervous about the matter. Just as the doctor was going to start work, she threw her arms round the old lady's neck, and sobbed: "One last kiss, mamma, before the operation!"

AN HONEST MAN.—Dr. Morton, by advertisement, informs the inhabitants of Tenterfield that he has resigned the appointment of Government vaccinator, as he cannot conscientiously vaccinate, otherwise blood-poison, the population.—*Sydney Bulletin*, Sept. 3, 1881.

IN NEW ZEALAND, as in Australia, there is little small-pox, but as business is to be done in vaccination, constant attempts are made to excite alarm, and compel the authorities to enforce vaccination. A correspondent informs us that the doctors have recently been making an inquisitorial examination of children from house to house and from school to school. Unvaccinated scholars are sent home; and thus the children of conscientious anti-vaccinators are, so far, condemned to ignorance, as in Holland and some parts of the United States—a worse infliction than fine or imprisonment. A number of Maories have recently been vaccinated, and at Parihaka a Maori has started as public vaccinator. A little girl at Nelson, Ellen Jane Thorne, has been killed, and the jury returned the verdict that her death "was caused by the vaccine disease." We hope our friends at Nelson, Dunedin, Auckland, and other places will start Anti-Vaccination Leagues, and at all hazards resist the extension of the dangerous superstition.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 34.] JANUARY, 1882. [Price 1d.

NOTES OF THE MONTH.

Dr. Richardson is to be commended for his outspoken condemnation, at the Brighton Public Health Congress, of the fashionable nonsense prevalent as to immunity from disease by means of Pastorian inoculations. "Science," he said, "is in the main most useful, but is sometimes proud, wild, and erratic, and has lately proposed a desperate device for the prevention of infection's perils. She proposes to prevent one peril by setting up another. She would inoculate new diseases into our old stock, in the anticipation that the new will put out the old. I pray you, be not led away by this conceit. This manufacture of spic-and-span new diseases in our human, bovine, equine, ovine, canine, and perhaps feline species is too much to endure the thought of, especially when we know that purity of life is all-sufficient to remove what exists, without invoking what is not." This breath of common sense is reviving, after the course of silliness we have endured since Pasteur's inoculations for chicken cholera, and *charbon* in sheep caught the popular fancy, and the last revelation of science was thus delivered, "Hurrah! the terror of stench is passing away! We shall soon be able to exist in whatever dirt we like after inoculation with the complete series of filth fevers." Dr. Richardson recalls the public from such insanity to the true gospel of health, assuring them afresh, that in the observance of simple and well-attested sanitary laws is the sure and easy means of safety from disease. How far this profession of faith is in accordance with Dr. Richardson's private habit of vaccination and re-vaccination we are not concerned to decide. We require no stronger condemnation of the practice than his own testimony at Brighton.

Mr. Edwin Chadwick's address at the same Congress was equally satisfactory. He dealt with the treatment of zymotic disease, endemic and epidemic, and had not a word to say for vaccination. He maintained that "small-pox' typhus, and other fevers occur on common conditions of foul air, stagnant putrefaction, bad house drainage, sewers of deposit, excrement-sodden sites, filthy street surfaces, impure water, and over-crowding"; and "that the entire removal of such conditions is the effectual preventive of diseases of those species, whether in ordinary or extraordinary visitations." This is precisely what we have to say of the prevention of small-pox in opposition to the vaccinators with their miraculous dodge. Let us attend to the conditions of health in general, and we shall have its blessing in full, with exemption from small-pox as a consequent particular. When epidemics occur, Mr. Chadwick recommends the separation of the unaffected from the affected, with home treatment if possible; if not, then by providing convenient temporary accommodation, avoiding the carriage of the sick to a distance, and their aggregation in monster hospitals, where the chances of recovery are diminished, and the death-rate augmented. Mr. Chadwick is the oldest representative of that earnest band of sanitarians who, in the course of the last fifty years, have revolutionised the thought of the world concerning disease, who have substituted hygiène for medicine, and taught, and proved in practice, that to a vast extent we hold our fate as to life and health and death in our own hands. In the light of this doctrine, vaccination lingers as a survival from the age of darkness, having no place in Mr. Chadwick's philosophy.

Dr. Alfred Carpenter has occasionally appeared as one of the wilder vaccinators, but in his speech at the Brighton Congress he exhibited a temper and pursued a line of argument with which our sympathy was almost unbroken. He was pleased to say that "if anti-vaccinators were as energetic in the promotion of sanitary work as they are in antagonism to vaccination, they would be doing some good in the world, and assist in bringing about a condition of things which would render vaccination altogether unnecessary." The

observation is somewhat enigmatical. Anti-vaccinators, so far as we possess their acquaintance, are one and all sanitary reformers, prophesying continually that salvation from small-pox is not to be purchased by the performance of the Jennerian trick, but by the faithful observance of the laws of health. Dr. Carpenter's admission that under any circumstances vaccination may become unnecessary is a grave departure from orthodoxy. The elders in the vaccine synagogue teach explicitly that no sanitary measures, however punctilious, can save from small-pox. There is one prophylactic, and one only—vaccination and periodical revaccination. Dr. Carpenter must beware and revise his opinions, or he will find himself in our fellowship—a fool and a fanatic. Nor did the Doctor merely indicate that the sacred rite might pass away: he went on to say, that "it had been established by undoubted experiments that the cultivation of morbid matter might convert what was at first a comparatively harmless secretion, into a virulent material, capable of generating acute disease." Here we have an inadvertent confession of one of the chief perils of vaccination. It is vain to speak of vaccine virus as harmless in presence of such "undoubted experiments." If what is a comparatively harmless secretion at one moment may, by transfer to another organism, be converted into a virulent material, capable of generating acute disease, are not many of the disasters of vaccination accounted for? and not only accounted for, but proved to be beyond foresight and prevention?

Mr. Crane's correspondence with the members for Birmingham is worth reading. Mr. Muntz is so well-known for his wooden-headed and reluctant Liberalism, that he is simply true to his nature when he describes the vaccination laws as of "inestimable value to the human race," and proceeds to assert that those who disobey them "must abide the result, whether rich or poor." He overlooks Mr. Crane's point, that the result is not the same to the rich as to the poor—the penalty being as naught to the one, whilst it is little short of ruinous to the other. To that, however, Mr. Muntz might not object, it going with his style of mind that what is tolerable eccentricity in a man of means is insufferable presumption in a man of wages. Moreover, if iniquitous law is not resisted, how can it ever be repealed? Has not the price of English freedom ever been paid in steadfast opposition and disobedience to tyranny? Mr. Bright's position is well understood. He and Mr. Chamberlain hold by the Jennerian superstition, but they would not persecute unbelievers—at least, further than the infliction of a single fine. The relaxation of the law, so far, was a project of the Government in the first flush of virtuous enthusiasm; but fearing defeat in the House of Commons, the resolve melted away. The opposition in the Commons was never tested; it was inferred, and we dare say correctly. Still, we think the Government might have put the House in possession of the reasons for which they contemplated a modification of the law; and the reasons being discovered, the feeling of the House might have taken a different turn from that which Mr. Bright indicates. The ignorance of Parliament as to the action of the Vaccination Laws is well-nigh incredible; and enlightenment can only proceed from discussion—if not more effectually through the sharper teaching of insurgent constituencies. Nevertheless, the delay is working for good. Instead of a modification of the compulsory law, we shall have the total abolition of compulsion. It is the happy way with reforms—the deferred or rejected compromise leads to the complete fulfilment of justice.

We have frequently to remark the irritation of medical men when it is assumed that their favour for vaccination has a pecuniary motive—as if it were implied that their belief in the practice is rooted in their love of fees. The imputation is unwarrantable, and, when advanced so grossly, must proceed from imperfect observation. Many recommend vaccination with fervour who have nothing to gain from it. At the same time, there is no reason to forget the fact that vaccination means money—and much money; and that no profession as a body ever surrendered even unworthy gains willingly. Hobbes has said that if the axioms of Euclid crossed the interests of any set of men, they would be disputed by that set. Elsewhere we read that "a gift blindeth the wise, and perverteth the words of the righteous." It is surely an affectation to pretend that because a man happens to be a member of an honourable profession he is thereby exempt from the ordinary weakness of humanity. Not so thought Jenner. Writing to his friend Moore, in 1817, he relates:—

Sometimes, indeed, medical men err with their eyes open. One of them a short time since was called upon to vaccinate a number of paupers for a certain sum. The only source of infection was two very imperfect pustules on the arms of a scabby child, which I had condemned as deceptions. Notwithstanding this sentence (being in the situation of Shakespeare's Apothecary), the job was done, and he brought home beef and mutton in his pocket.

Nevertheless, we never care, unless under pressure of evidence, to attack the practice of vaccination on financial grounds. It is far more to the purpose to prove—first, that it does not prevent small-pox; and, second, that it induces other ailments—acute, chronic, and mortal.

Mr. E. A. Leatham, M.P. for Huddersfield, writes:—"I can only repeat what I said before, namely, that I think a person who breaks the Vaccination Acts should be fined once, but no more." Mr. Leatham means to be kind; but suppose it were enacted that the members of the Society of Friends should, under equivalent penalties, have their children baptised by the parish priest, how would he appreciate the proposed concession that Friends who break the Baptism Act should be fined once, but no more? Would he advise submission to the fine? Would he not, on the contrary, recommend unflinching resistance? Yet on what principle can he maintain that what would be right for a Friend is wrong for a disbeliever in vaccination? No Quaker could pretend that baptism would harm his child, whilst resisting to any extremity compliance with what he considered a vain superstition. We, on the other hand, not only know vaccination to be a vain superstition, but we further know that certain injury, probable disease, and possible death are attached to the rite; and yet our common-sense, our science, and our tenderest affections are to be ruthlessly disregarded, or we may be let off with one fine! It was not thus that Friends achieved their liberties; and we prefer their example to the concession of their modern representative. Mr. Leatham is ready to eulogise his ancestors for their unbending adherence to their convictions; he would suffer us to enjoy ours after payment of one fine! From one aspect it is very droll, and from another very sad. We see how easy it is to garnish the memory of those who struggled with wrong in the past, and yet to perpetuate wrong equally flagrant in the present; but our honour consists, not in the mere admiration of historic righteousness, but in the measure wherewith we reduce similar righteousness to the conditions of our own day and generation.

In the *Leisure Hour* for the current month there is an article, "Jenner and his Successors," by Sir J. Risdon Bennett, M.D., F.R.S., which in its way is a curiosity in popular misinformation. The rotten and baseless Jennerian legend is reproduced without any abatement of its extravagance, and is followed by the fancy small-pox statistics with which the early vaccinators terrified the public and exalted their own services. Yet with this subservience to his authorities, Sir Risdon Bennett is able to execute a manœuvre on his own account, and dexterously steers clear of Jenner's ascription of cow-pox to horse-grease—the essence of the Jennerian revelation. At the same time he uses Jenner's unwarrantable dictum, that cow-pox is a mild form of small-pox, to justify the use of Ceely and Badcock's small-pox-cow-pox as true cow-pox, passing over the weighty scientific testimony to the contrary as non-existent. Such is candour! Then the experiments of Pasteur are recited afresh with abject faith, and set forth as confirmations and developments of Jennerian theory and practice. Lastly, we have a few observations on compulsory vaccination —"a strong measure in this land of liberty," but "the propriety and necessity of which only require calm and unprejudiced inquiry." Of those who oppose vaccination, it is said that "their persistent misrepresentation of facts is great, nay criminal." If we could be so discourteous, we might describe Sir Risdon Bennett's little effort in similar terms. Anyhow, our friends who read his article will perceive how credulous and how parrot-like, and, withal, how artful, it is possible for an F.R.S. to be.

The haste and desperation with which medical men have clutched at Pasteur are highly significant. They prove how wide and deep is the distrust in vaccination, and how welcome is assistance, however shadowy, for their sinking faith. Nevertheless, greater composure would be more becoming, as well as a more exact appreciation of what Pasteur has done and taught. Our Pastorians exceed Pasteur as the Wilkesites did Wilkes. Dr. Samuel Wilks, who is not commonly given to loose speech, observes in the *Nineteenth Century*:—

"The remarkable experiments of Pasteur, performed for *the mitigation of the cattle plague*, have met with the recognition of the French Government and the applause of the civilised world."

So far, Pasteur has done nothing in mitigation of the cattle plague; but undue and, as we think, unwarrantable elation has created this confusion in the mind of Dr. Wilks. Many such furores have we witnessed, but after a little season they pass away. Rarely indeed is the science that is true born into the world with such instant recognition and uproarious acclaim.

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THE NATIONAL VACCINE ESTABLISHMENT.

A Curious Story.

With £3,000 a-year, the National Vaccine Establishment was constituted by the House of Commons on June 9, 1808; sixty members voting for the project, and five against.

The reasons for the institution were somewhat complicated. The Royal Jennerian Society had been wrecked by Jenner's jealousy and intrigues. The working and subscribing members seceded with Dr. Walker, and set up the London Vaccine Institution; and a variety of ornamental and influential folk, who paid little and did less, found themselves with Jenner on their hands, exigent, impecunious, and helpless, and they publicly committed to the patronage and diffusion of vaccination!

It was an awkward situation, and two operations for relief became necessary: first, to dispose of Jenner; and second, to escape from the maintenance of vaccination.

The first was effected by inducing the House of Commons to vote Jenner £20,000, and the second by the institution of the National Vaccine Establishment. Thus dexterously, fashionable and medical London contrived to get rid of Jenner and vaccination on terms satisfactory and honourable to all concerned.

The early furore for vaccination had spent itself. Scepticism had thriven by experience. Many of the vaccinated had taken small-pox, and explanations and excuses were becoming exhausted. It was easy to claim the benefit of mistakes when the operators were amateurs; but when the failures were the work of Jenner and his certified associates, it was hard for faith to hold out. Spurious cow-pox served to account for many disasters; but when Jenner, pressed to define spurious cow-pox, was driven to confess its non-existence, and that, when he had spoken of it, he had only meant any irregular action of cow-pox on the persons of the vaccinated, it is easy to imagine how people who had respect for themselves were pleased to drop out of the connection. They might not care to express all they suspected, nor to proclaim their credulity, but it was a welcome deliverance to be no longer responsible for a practice and a character grown so questionable. On John Bull's broad back was laid the burden.

In the project of the National Vaccine Establishment there was an explicit concession to the scepticism of the time. One of its purposes was alleged to be *Investigation*. Lord Henry Petty, in recommending the measure in the House of Commons, observed: "The evidence as to the infallible efficacy of vaccination is confessedly incomplete; and it is highly desirable that the truth should be ascertained by public inquiry, rather than by societies whose conductors are liable to the imputation of mercenary motives." Jenner bitterly resented the indignity implied in placing vaccination under investigation. He held, and in a sense justly, that it was too late to speak of investigation when the reality of his discovery had been attested in the public honours and rewards conferred upon him. "Alas!" he exclaimed, "poor Vaccinia, how art thou degraded!" He was still further outraged by his exclusion from the Board of the Establishment, on the ground that the public might have assurance of impartiality. How much sincerity there was in the profession, we do not pretend to divine; it is sufficient to point out that matters had come to such a pass with vaccination that it was considered expedient to conciliate the taxpayers with the promise of inquiry for their money. Plainly the enthusiastic certainty of 1802 had given place to a widely-different sentiment in 1808.

There were, however, wheels within wheels. "You may take it for granted," said a Radical of those days, "that every vote of public money has an object in excess of the ostensible one, and covers jobs big or little." And so it was in the case before us. The discomfited residue of the Royal Jennerian Society had influence with the Government to take over their smashed-up enterprise; but their solicitation might have been ineffectual, had not the Government seen a way of providing for a certain claimant in the course of the operation. Sir John Moore was serving his country in the Peninsula; he had friends at the sources of power; and he had a brother named James, surgeon to the Life Guards, for whom a comfortable berth was wanted. Let us make Moore, they said, Director of this new Establishment, with a salary of £200 a-year; and the thing was done. Investigation was promised, Cow-Pox was endowed, and Moore was provided for.

Jenner had actively promoted the formation of the Establishment, under the conviction that he should be its governor; and when the organisation was revealed, he was profoundly disgusted. The management was assigned to a Board of eight members, consisting of the president and four censors of the College of Physicians, and the master and two governors of the College of Surgeons, with salaries of £100 a-year apiece. From this Board, as stated, Jenner was deliberately excluded, "so as to ensure impartial investigation." It was at first proposed to hold Jenner subordinate to the Board, giving him the title of director, with Moore as his working deputy; for it was clearly recognised by those who had had experience of him during his London career, that for regular duty he was good for nothing; and that with his sickly family resident in Gloucestershire, he was never to be reckoned upon for a day. When, however, the Board disregarded his nominations, especially that of his bully, John Ring, as "Principal Vaccinator and Inspector of Stations," he at once severed his connection with the Establishment; "since," in his own words, "he found that he was to have nothing to do, and that his office was only a name." "My not being a member of the British Vaccine Establishment will," he wrote, "astonish the world; and no one in it can be more astonished than myself"; but so far as can be discerned, the astonishment was chiefly limited to himself. Evanescent and futile is the astonishment of the world under most circumstances, and had the public opinion of the time been consulted, there is little doubt that it would have gone with the Board against Jenner.

Moore was, therefore, promoted to Jenner's place as Director of the National Vaccine Establishment, in subordination to the Board of Phy-

sicians and Surgeons. Seven stations, with seven superintendent surgeons, were opened in London for vaccinating all who should apply, and for collecting and distributing virus. Letters to and from the Board were exempted from postage (a valuable privilege in those days), and medical men throughout the country were invited to refer to the office for virus and for advice in cases of difficulty.

"At first," writes Moore, "the applicants for vaccination at the various stations were not numerous, not amounting to 3,000 a year; but, by continued exertions, and the declension of prejudice, the numbers regularly increased, and 7,771 persons were vaccinated in London in the year 1816."*

These numbers are significant, as indicating the extent of the collapse of vaccination, and how little the continuous decline of small-pox in London was due to its extension.

Moore was a shrewd tactician. He had the sense to recognise that if there was anything in vaccination, it was folly to stand at variance with Jenner; and by persuading him that he exaggerated the offence implied in the policy of the Board, he gradually soothed his feelings, and led him into a long and confidential correspondence. Jenner, on his side, finding that nothing resulted from his sulks, relaxed, and from time to time favoured the Board with the light of his countenance and counsels.

The national endowment of vaccination affected prejudicially all other enterprises in the same line. What remained of the Royal Jennerian Society withered up, and the conductors of the London Vaccine Institution found the collection of subscriptions almost impossible. It was naturally objected by those solicited, "Why should we be asked to subscribe for what Government has already provided?" But with Dr. John Walker, the director of the London Institution, vaccination was a fanaticism, and he was ready to live on bread and water rather than withdraw from the promotion of what he was persuaded was a work of salvation. He therefore struggled on, in spite of discouragement and petty means, and as the inability of the Government Establishment to meet demands became manifest, whether from excess of dignity or apathy, the Quaker Institution, as it was called, began to thrive, to acquire the confidence alike of the medical profession and the public, and to rival in business the Establishment itself.

As for the investigation promised in the House of Commons, it was never even attempted. When a case of small-pox, or injury, or death after vaccination was reported, it was the recognised formula to assert either some defect in the operation, or the virus, or some cause, or any cause, *ab extra*, rather than allow the Jennerian principle to suffer. As an illustration of the procedure of the Board in this respect, we have the instance of Mr. Thomas Brown, surgeon, Musselburgh, as served up in Moore's insolence.

"The Vaccine was in two years spread over Scotland," writes Moore. "After a time, however, one croaking voice was raised to disturb the general concord. Mr. Brown, who was fretting in obscurity at Musselburgh, published a book in 1809 to maintain that the Vaccine only possessed the property of preventing the small-pox temporarily; that in three years its influence declined; and in five or six, hardly any security against the small-pox remained."

Brown submitted his cases to the Board, but they met with no attention.

"In this extremity," continues Moore, "he wrote a scurrilous accusation of the National Vaccine Establishment to the Secretary of State, which was referred to the Board. When they met, the Registrar read it, and then tied it up with red tape among that mass of papers which are consigned to rest."*

Could more be expressed in less? Thus was Brown, the representative of true science and enlightened and honest inquiry, set at naught and traduced by a Board endowed for investigation! Nor, in saying so, do we speak simply as antagonists of vaccination. Brown was no anti-vaccinist. What he contended for is now everywhere admitted by vaccinists. They allow that the protection afforded by vaccination is temporary, and that it is necessary to renew its prophylaxy from time to time. The practice of re-vaccination is based on the verity of Brown's contention, and yet, according to Moore, he was a vain-glorious and scurrilous fellow, and by Jenner was pronounced "an object of commiseration rather than of resentment."

As purveyors of virus, too, the Establishment fell behind Walker's institution, and the Quakers' pox had the preference among connoisseurs in the article. Jenner wrote to Moore, March 5, 1816:—

"The matter sent out by the National Vaccine Establishment is much complained of. I was applied to a few weeks since by the surgeons of the hospital at Gloucester for some vaccine matter, and their request was accompanied by the observation, 'That after using thirty points sent from town, not a single pustule was produced.'"

To account for such failures, it began to be reported that the virus was gradually losing its virtue in transit through many arms; but, continued Jenner:—

"Medical men are more expert than others in discovering causes without the fatigue of much thinking, and in the present instance they have all hit upon the wrong one—no great wonder. They attribute the lessened activity of the matter, and its disposition to produce imperfect vesicles, to the great length of time which has elapsed since it was taken from the cow, and to the immense number of human subjects through whom it has passed. This is a conjecture, and I can destroy it by facts. The matter may undergo a change that may render it unfit for further use by passing even from one individual to another; and this was as likely to happen in the first year of vaccination as the twentieth. There are medical men who will take anything they can catch under the mere name of vaccine matter, or from pustules incorrect in character. It is from the spread of such matter that the dissatisfaction of which I speak has arisen."†

* "History and Practice of Vaccination," p. 223.

* "History and Practice of Vaccination," p. 226.
† Baron's "Life of Jenner," vol. ii., p. 393.

When we refer to the record of the National Vaccine Establishment, there is little reason for surprise over its inefficiency. The House of Commons, having voted the endowment of £3,000 a year, the Government committed the organisation of the Establishment and the administration of its funds to the heads of the Royal College of Physicians. How the £3,000 a-year was disposed of, came to light in 1822, when the accounts were published. The statement stood thus for 1821, representing what had gone on during the past twelve years: —

	£	£
PHYSICIANS.—Sir Henry Halford, Bart.	100	
Dr. Frampton	100	
Dr. Thomas Hume	100	
Dr. Charles Badham	100	
Dr. R. Lloyd	100	
		500
SURGEONS.—Sir Everard Home	100	
Sir W. Blizard	100	
Henry Cline	100	
		300
REGISTRAR.—James Hervey, M.D.	300	
DIRECTOR.—James Moore	200	
SECRETARY.—C. Murray	50	
		550
VACCINATORS.—One at £150	150	
Five „ 100	500	
One „ 75	75	
Six „ 50	300	
		1,025
HOUSEKEEPER	40	
MESSENGER	52	
Rent of furnished house, 18, Percy-street	260	
		352
Printing, stationery, coal, candle, &c.	—	183
Total		£2,910

The accounts, though they revealed what was suspected, were widely denounced as scandalous. Parliament voted £3,000 a-year to extend vaccination among the poor, and here were a set of physicians and surgeons pocketing £800 of it, and muddling away the greater part of the remainder. They affected to regard vaccination as the deliverance of mankind from the scourge of small-pox, and yet they had not hesitated to appropriate the means provided for its diffusion. There was scarcely the pretence of work for wages. The Board met once a week, but the attendance was irregular, and at each member's discretion. The eight hundred-a-yearers dropped in when convenient for gossip, and to ask what was doing. When set upon their defence, the argument was that the public were distrustful of vaccination, and that to inspire confidence it was necessary that the Establishment should have the benefit of the ostensible support of the College of Physicians and the College of Surgeons, for which the honorarium of £100 each annually to their representatives was by no means excessive. In reply, it was pointed out that Dr. Walker, supported by voluntary contributions, collected with difficulty, and with less than the pay of many an artisan, had done more for vaccination in London and the country, and was more respected and trusted, than the Establishment with all the prestige of authority.

As the result of many protests, the waste of public money was brought before the House of Commons by Joseph Hume. It was Mr. Hume's distinction that, with strong good sense and invincible patience, he upheld the standard of honesty in public finance, holding that it was as wrong to defraud the nation as to defraud an individual; and that it was as foolish (not to say more wicked) to pay away the people's money for nothing, as to throw away one's own. The principle, so obviously indisputable, and yet so shamelessly violated in every department of the State, was enforced in detail by Mr. Hume with a persistency and success that has never been rivalled, and, we fear, never appreciated as deserved. He showed that patriotism was a practical virtue, instead of a sentimental pretext for public plunder, and taught honour to placemen to whom honour was unknown. Appropriately, therefore, Mr. Hume led the charge against the National Vaccine Establishment, and in 1827 the annual vote was reduced from £3,000 to £2,500, £300 of the £500 being saved by knocking off two useless physicians and one useless surgeon. Even then the extravagance that remained continued to excite indignation, the consequences of which are recorded for us in a "Report from the Select Committee on the Vaccine Board, with the minutes of evidence, ordered by the House of Commons to be printed, Aug. 28, 1833." If space allowed, it would be easy to linger over the disclosures of this Committee. Suffice it to say, that Dr. George Gregory, of the Small-Pox Hospital, held that the whole work of the Board might be done handsomely on £1,200 a-year. The Committee, however, shrank from such a severe exercise of economy, and recommended the provision of the following staff and expenses:—

Vaccinators at Stations in London (a sum which will probably admit of reduction)		£900
Inspector } Registrar }	Qualified on occasion to exchange duties	{ 200 { 200
Messenger		55
Offices, rent of		100
Incidental expenses		150
Total		£1,605

The Committee observed that the Board might consist of two physicians and one surgeon, whose duties, not being onerous, might be discharged gratuitously. As the Committee was more loose-handed than Dr. Gregory, so the Commons were laxer than the Committee. The President and a censor of the College of Physicians, and the President of the College of Surgeons, were suffered to continue with their £100 a-year each, and the annual subsidy for the establishment stood fixed at £2,200, until vaccination, under the disguise of sanitation, developed into the monstrous proportions with which we are at this day afflicted.

There is much talk prevalent in favour of "the endowment of research;" but what may come of such endowment, when not sharply looked after, is manifest in the example of the National Vaccine Establishment. The investigation, assumed to start with, was never pursued; and the guardianship of the public interest undertaken by the Colleges of Physicians and Surgeons was never

anything but make-believe. Annual reports were presented to Parliament, signed by the heads of the Establishment, but of research they bore no trace, and many of them might have been dashed off by the Registrar in the course of an hour. Destitute of any scientific merit, these reports yet afford some curious glimpses of what was going on from year to year, with indications of the chief points of resistance encountered by the practice of vaccination; and, in turning over the series from 1810 to 1840, we have made the following notes, which may be read, perhaps, with interest.

Variolation.

The chief resistance proceeded from the inoculators with small-pox; indeed, with the exception of apathy, there might be said to be no other resistance. Hence we read under the several dates:—

1810.—"During 1809, the surgeons vaccinated 1,493 persons. We are sorry to have to relate a decline of vaccination in the Metropolis, and an apparent indisposition to the practice of it; and to express regret that there should be evil-disposed persons, who are endeavouring to frustrate his Majesty's intentions by alarming the misinformed with stories which they know to be false."

1812.—"We have reason to ascribe the increase of small-pox in London during last year to the rash and inconsiderate manner in which great numbers are still inoculated for the small-pox, and afterwards required to attend two or three times a week at the place of inoculation in every stage of their illness. The practice of inoculation is the great means whereby small-pox is kept in existence, and its infection propagated to persons and places where it would not otherwise be seen."

1814.—"The Board has with great regret to observe that, although the punishment of three months' imprisonment was awarded against Sophia Vantandillo, for carrying her child, whilst under the influence of small-pox, through the streets, (which infected many others, eight of whom died,) the unwary are still enticed by the hand-bills of shameless empirics to submit their children to variolous inoculation. It is, however, to be hoped that the above sentence passed by the Court of King's Bench, which the Board has taken every method of promulgating, may produce considerable benefit. The Board selected Sophia Vantandillo as a proper example on account of the extent of the mischief occasioned by her misconduct; and that this prosecution, followed by a lenient punishment, may prevent any further wilful exposure of inoculated persons, is its fervent wish. The Board at the same time prosecuted Mr. Burnet, who inoculated the child, and who has long circulated most mischievous and offensive handbills, offering to inoculate persons with small-pox gratis, and stigmatising vaccination as productive of the most loathsome disease. This practitioner having suffered judgment to go by default, has been sentenced by the Court of King's Bench to six months' imprisonment.

"The whole of the expenses incident to this Establishment for 1814 have been defrayed by the vote of last year, but the Board regrets that in consequence of the recent prosecutions and convictions, and the measures adopted for the more effectual extension of the practice of vaccination throughout the Empire, an addition of £500 to the annual grant will be necessary."

1815.—"In Edinburgh, Glasgow, and Norwich, inoculation is disused, and, in consequence, the small-pox is scarcely known. In the country about Aberystwith, in Wales, and Bawtry, in Yorkshire, it has entirely disappeared. The reverse is, unhappily, the case in Portsmouth, Bristol, and London. In the metropolis alone the mortality may be estimated at 1,000 annually; perhaps throughout the United Kingdom it is not less than ten times that number. It appears to us that this waste of human life can be prevented only by such legislative enactments as will entirely put a stop to inoculation with small-pox."

That small-pox was increased by variolation we have no reason to doubt, notwithstanding the fact that towards the close of the last century, when variolation was most practised, small-pox was steadily falling-off; but to ascribe the existence and persistence of small-pox to variolation was absurd. Small-pox was a widely-diffused disease before variolation was introduced to anticipate and minimise it.

1817.—"The pernicious practice of small-pox inoculation, now very generally relinquished by the medical profession, is only persisted in by a very few of the least creditable class of practitioners, and is usually carried on clandestinely; yet the Board are concerned to state that this destructive operation is now performed for gain by itinerant Empirics, Farriers, Publicans, Nurses, low, cunning people of both sexes, and of various descriptions. And such is the infatuation of the poor and ignorant, that many of them carry their infants to be inoculated by those who only know how to inflict, but not how to assuage, the violence of small-pox. The consequence has been that many have perished under their management; and the disease in particular districts has been widely disseminated. As this iniquitous conduct has prevailed much in London, an epidemic of small-pox was last year excited among those who were not secured by vaccination, and 1,051 persons died of the disease."

1836.—"Only 300 died of small-pox in London in the course of last year; and it is probable that this mortality, however comparatively small, is owing to the continued partial practice of inoculation, which is liable to disseminate far and wide its contagious influence, to the imminent danger of all who have not been protected by previous vaccination, or by having had small-pox already."

Variolation was made a penal offence in 1840, and thenceforth ceased to serve as an excuse for the persistence of small-pox in defiance of vaccination.

Failure of Vaccination.

Accepting Jenner's revelation, the heads of the medical profession in London assured the public, in a manifesto issued in 1800, that "those persons who have had cow-pox are perfectly secure from the future infection of the small-pox." It was a rash assertion. Proofs of its untruth were not slow to appear. At first they were denied, then explained away, and then admitted under qualifications more or less adroit. When, in 1808, the National Vaccine Establishment was constituted, the fact of the failure of Vaccination to answer to its original promise was generally recognised. Nevertheless, the reports of the Establishment

exhibit much ingenious wriggling and attempts to out-lie Nature. For example:—

1811.—"That in some instances the small-pox has affected persons who have been most carefully vaccinated, is sufficiently established; nor ought we to be surprised at this, when we consider that the inoculation for the small-pox sometimes fails, and that several cases may be produced in which persons have been affected with the natural disease more than once in the course of life. The Board have infinite satisfaction in stating the two following important and decisive facts in proof of the efficacy and safety of vaccination, namely, that in the cases which have come to their knowledge, the small-pox after vaccination, with a very few exceptions, has been a mild disease, and that out of the many hundred thousand persons vaccinated, not a single authenticated instance has been communicated to them of the occurrence of fatal small-pox after vaccination.

"The Board have great pleasure in stating that the money granted by Parliament during the last session has been sufficient to defray the expenses of the year 1811, and they are of opinion that the same sum will be adequate to the expenditure of the current year."

There were 3,148 vaccinations effected under the Board in 1811, which was at the rate of about £1 a-head.

Moore, after reporting some cases of small-pox after vaccination, at St. Osyth, in Essex, went on to say:—

1816.—"Some very rare instances of failures in vaccination, as exceptions to a general law, may be expected as long as the small-pox is prevalent; since it has been fully ascertained that when the air is strongly impregnated with the infectious vapour of small-pox, some of those who have had the disease are attacked a second time."

1818.—"From the foundation of this establishment in 1808 to the present year there have been vaccinated 52,253 persons at the stations in London. Only four of these are yet known to have had small-pox afterwards, and these were never very seriously ill."

1819.—"The testimonies of some of our correspondents concur in showing that great numbers of persons who had been vaccinated have been subsequently seized with a disease presenting all the essential characters of small-pox; but that in the great majority of such cases, the disease has been of comparatively short duration, unattended by symptoms of danger. In several of these cases, however, the malady has been prolonged to its ordinary period, and in eight reported cases it has proved fatal. It appears to us to be fairly established that the disposition in the vaccinated to be thus affected by the contagion of small-pox does not depend upon the time that has elapsed after vaccination, since some persons have been so affected who had recently been vaccinated, whilst others who had been vaccinated eighteen and twenty years have been variolated, and exposed to contagion with impunity."

1820.—"It is true that we have received accounts from different parts of the country of numerous cases of small-pox having occurred after vaccination, and we cannot doubt that the prejudices of the people against this preventive are assignable (and not altogether unreasonably, perhaps) to this cause. These cases the Board has industriously investigated, and though it appears that many of them rest only on hearsay evidence, and that others seem to have undergone the vaccine process imperfectly, yet after every reasonable deduction, we are compelled to allow that too many still remain on undeniable proof to leave any doubt that the pretensions of vaccination, to the merit of a perfect and exclusive security in all cases against small-pox, were at first admitted too unreservedly."

1825.—"That a considerable number of persons have had small-pox after having been vaccinated, we are ready to admit; although of cases of this kind, a large majority are found on examination to be without that test of the operation being performed successfully and effectually, which all agree to be necessary to perfect security. Vaccination, therefore, it will be said, does not afford an absolute and perfect security. We do not present it to the world with that pretension, but we declare it to be the least imperfect of the resources we possess for encountering the disease."

1827.—"It is true, cases are reported to us very often of the occurrence of small-pox after vaccination; but we have reason to believe that the number of those who fall into this safe, though sometimes severe disease, after vaccination, is not greater than that of those who formerly *died* by inoculation whilst that practice prevailed."

1833.—"Of an equal number of persons vaccinated and inoculated, only so many of the former will be capable of taking the small-pox afterwards, and that in a safe degree of the disease, as are found to die by the latter."

1836.—"If 300 children be vaccinated, one will be susceptible of small-pox afterwards, but only in a mild and perfectly safe form, whereas if 300 be inoculated, one will surely die."

As evolutions from inner consciousness, the statistics of variolation and vaccination under 1827, 1833, and 1836 are noteworthy. They illustrate the facility of the Board at the discovery of what was thought *ought to be true.*

Development of a Fabulous Salvation.

1811.—"Previous to the discovery of vaccination, the average number of deaths by small-pox within the London bills of mortality was 2,000 annually; whereas during 1811, only 751 died of the disease, notwithstanding the increase of population."

1818.—"During the year, 6,289 have been vaccinated in London and the vicinity; and the Board have much satisfaction in adducing unequivocal evidence of the increasing advantages of the Jennerian discovery; for it appears from the bills of mortality of London that, instead of 2,000 deaths by small-pox, which was the annual average previous to the practice of vaccination, there died in 1818 only 421."

That, previous to the introduction of vaccination, 2,000 was the average annual death-rate from small-pox in London is a statement that requires definition. At an early date the number is under the mark, and at a later it is over the mark. Dr. Farr delivers the truth in these words:—

"Small-pox attained its maximum mortality after inoculation was introduced. The annual deaths

from small-pox in London, from 1760 to 1779, were on an average 2,323. In the next twenty years, 1780 to 1799, they declined to 1,740. The disease, therefore, began to grow less fatal before vaccination was discovered, indicating, together with the diminution of fevers, the general improvement of health then taking place."

Bearing Dr. Farr's figures in mind (and not forgetting the 2,000 adduced by the Board in the reports for 1811 and 1818), what does the reader think of the following audacious attempts on public credulity?—

1826.—"From the quantity of vaccine lymph distributed, we are led to presume the practice of vaccination is becoming daily more general; and the inference is still further confirmed by the fact that in 1826, only 503 deaths have occurred from small-pox within the bills of mortality; whereas in the preceding year, 1,299 persons are recorded as having fallen victims to the loathsome disease. The whole of this difference ought not, perhaps, in candour to be attributed to the influence of vaccination; for the small-pox during 1825 assumed a peculiarly malignant character; and there were more instances of the distemper occurring twice in the same individual than had ever been reported to us before. But when we reflect that before the introduction of vaccination the average number of deaths from small-pox in London was annually about 4,000, no stronger argument can reasonably be demanded in favour of the value of this important discovery. Nor can any more striking proof be given of the paternal care of the Government to protect the people at home and abroad from this destructive disease than the establishment and maintenance of this Board."

The bouncing falsehood, having passed muster, was repeated with enlargement at a suitable interval:—

1834.—"Only 334 deaths by small-pox have been reported, a number considerably less than have died in any year since the introduction of vaccination, and falling short by at least 4,000, of the average of deaths annually by small-pox in London before the protecting influence of cow-pox was discovered and promulgated."

And again it appeared with a fresh touch of exaggeration:—

1836.—"The annual loss of life by small-pox in the metropolis before vaccination was established exceeded 5,000, whereas, in the course of last year, only 300 died of the distemper."

Impunity being apparently assured, the fables came to be delivered as assured matter-of-course, thus:—

1839.—"Formerly 5,000 died annually of small-pox within the London bills of mortality; but since vaccination superseded inoculation, the number has gradually decreased, until it amounted to only 200 in the year 1837. In the course of the year that has terminated (during which small-pox prevailed epidemically), there died 800; not one more, after all, than one-sixth of the number who died annually [that is to say, 4,800] during the prevalence of inoculation, notwithstanding the increased population of London and its environs. By a careful retrospect, we are, therefore, justified in stating that 4,000 lives are saved every year in London since vaccination so largely superseded inoculation."

The fall in small-pox that set in towards the close of last century was not confined to London, but extended to many European populations. It began before vaccination was heard of, and continued independently of it, though the vaccinators eagerly claimed the phenomenon as the result of their superfluous efforts. The claim was absurd as concerned London, for it plainly appears that vaccination during the years in question never overtook, or even approached, the metropolitan birth-rate. Here is the record of the vaccinations effected by the Establishment in five years:—

1818	1819	1820	1821	1822	Total.
5,490	7,874	6,054	6,627	8,230	=34,275

The entire vaccinations in five years not equalling the London births in any one year! There were, we dare say, as many more vaccinated by voluntary effort; but the figures, however extended, cannot be got to cover the immense mass of lower-class Londoners, who then, as now, were the chief factors of small-pox. What we say emphatically is, that the National Vaccine Establishment had as much influence on London small-pox as had the Holy Alliance.

Pock-marked Faces.

One of the arguments for vaccination at this day runs thus:—"How do you account for the absence of pock-marked faces? When I was young, forty years ago, nothing was commoner than countenances disfigured by small-pox." Occasionally the reminiscence is transferred to a mother or grandmother, who is reported to have said that she remembered when every third or fourth person was pitted with small-pox.

We need not take seriously the motherly or grandmotherly reminiscences, so apt to be touched with the glamour of years. Confining ourselves to living memories, the owners thereof may, perhaps, be surprised to learn that the transformation for which they personally avouch was effected before they were born, or were qualified observers; and before vaccination was sufficiently practised to have wrought the change; and here is the evidence, as set forth in the reports of the National Vaccine Establishment, and printed by order of the House of Commons. Under the following dates we read:—

1822.—"As a proof of the protecting influence of vaccination, we appeal confidently to all who frequent theatres and crowded assemblies to admit that they do not discover in the rising generation any longer that disfigurement of the human face which was obvious everywhere some years since."

1825.—"The deaths by small-pox amounted to 1,299 in 1825, a much greater number than has been reported for some years past. From this melancholy statement it is impossible to avoid the conclusion that the lower orders of society continue to be prejudiced against vaccination, and allow small-pox to take its course.

"And yet what argument more powerful can be urged in favour of vaccination than the daily remark which the least observant must make, that in our churches, our theatres, and in every large assemblage of the people, to see a young person bearing the marks of small-pox is now of extremely rare occurrence.

"To what can the freedom from the vestiges of so loathsome a disease be attributed, but to the protecting influence of vaccination? for inoculation has now been disused by all respectable practitioners for some time past."

1837.—"The rarity of an example of disfigurement by small-pox now to be found in the theatres, in churches, or in any large assemblage of the people, affords proof that vaccination has lost none of its efficacy."

Pock-marked faces are by no means uncommon at this day in London, though their number has diminished through more careful nursing and the use of well-known means for preventing disfigurement; and whoever cares to pursue the inquiry will discover that the majority of the marked have been vaccinated, and many re-vaccinated—a proof that it is not the rite which prevents the scars.

The general impression we derive from the reports of the Establishment, 1808-40, is that they proceeded from men who were committed to vaccination, but had no profound faith in its efficacy; who were averse from the admission of its impotence, and ultimately held by it as possibly the best available defence against small-pox. With ample means and opportunities for investigation, they made no discovery, nor achieved any advance in practice, nor apparently conceived that there was either discovery or advance to be made. They accepted small-pox as a mysterious ordinance of Nature, with cow-pox for a probable antidote, and there stuck fast, thoughtless and helpless. They did not even observe that small-pox was specially a disease of the young and the poor, nor deduce conclusions therefrom. They had their money, and went through an appropriate routine, and there their service ended.

PETITION TO PARLIAMENT.—As it is of great importance that when Mr. P. A. Taylor submits his motion to the House of Commons for the abolition of compulsory vaccination, he should be able to adduce some evidence as to the extent of popular feeling in his favour, the London Society are desirous of getting up a numerously-signed petition, and the Secretary will be glad to receive offers of co-operation in the needful labour, and will forward forms of petition to applicants.—Address Mr. Wm. Young, 114, Victoria-street, Westminster, S.W.

THE TRURO GUARDIANS have been prosecuting Mr. T. Cragoe with energy, and an appeal having been addressed to the Local Government Board for advice, the reply was conveyed in a copy of the well-known letter to the Evesham Guardians, counselling discretion when an incorrigible and influential anti-vaccinator has to be dealt with. Mr. Cragoe's prosecution has led to wide discussion of the merits of vaccination in the district, and to the discovery of serious injuries and deaths from the practice. There is no more effective method of exciting attention and diffusing truth than in resisting the law openly, and publishing the fact of resistance by all means available. Prosecutions are troublesome and costly, but are well worth the price

SANITATION, NOT VACCINATION, THE TRUE PREVENTIVE OF SMALL-POX.*

AT the first International Anti-Vaccination Convention, held last December at Paris, I had the honour of explaining the existing state of the opposition at that period to the Compulsory Vaccination Acts in England. My first thought on the present occasion was that I might appropriately continue the same theme, with a record of the important events which have occurred since our last convention, including the acceptance by Mr. P. A. Taylor, the leader of the Anti-Vaccination party in the House of Commons, of the position of President of the London Society for the Abolition of Compulsion, together with a glance at the conferences and public meetings in the metropolis and elsewhere, the public demonstrations at Brighton and Leicester, the considerable accessions of active support from influential quarters, the issue of important Parliamentary returns confirming our position, and the publication and distribution of literature, at least five-fold that of any similar period in England, with other indications of encouraging progress, which, if detailed, would constitute an interesting chapter in the history of our agitation. I prefer, however, to change my subject, and take one of wider application, and which may not be devoid of practical utility in the work which this Congress has undertaken, and to address you on the subject of "Sanitation *versus* Vaccination, as a preventive of Small-pox."

One of the most serviceable arguments in use by our opponents, the pro-vaccinators is, that prior to Jenner's discovery, small-pox was a scourge of the first magnitude, a relentless and fell decimator and destroyer of the human race. I shall not attempt to inquire how much of this is true, and how much due to a lively imagination, except to mention one testimony—that of Dr. James Moore, who, in his "History of Small-pox,"—a work dedicated to Dr. Jenner, says that inoculation has occasioned the loss of millions of lives. These points have been dwelt upon by abler pens than mine, and their testimony is before you.

Sanitation, which has for its end the prevention of disease by the removal of the causes of disease, is a science which for some years in England, America, France, and Germany, and in other countries has engaged the attention of some of the ablest and most thoughtful minds. It is not, however, a new discovery. It was taught by the Jewish lawgiver, Moses, in numerous stringent regulations for the tent and camp, and by the Greeks and Romans, as their systems of baths, aqueducts, and drainage-works testify. In Rome the remains of the *Cloaca Maxima* are pointed out to every stranger as one of the sights of the city. With the decline of the Roman Empire, sanitation became one of the lost arts, and for many centuries plagues and epidemics carried off countless thousands in all the large centres of population, and were regarded as visitations of God with which it was presumptuous to interfere. Macaulay, in his "History of England," showing

*A PAPER read before the second International Congress of Anti-Vaccinators, held at Cologne, October 12, 1881, by WILLIAM TEBB.

the conditions of life two centuries ago, says: "Cabbage-stalks and rotten fruit accumulated in heaps at the thresholds of the Countess of Berkshire and Bishop of Durham. Rubbish was shot into Lincoln's-inn-fields, and St. James's-square was a receptacle for all the offal, dead cats and dogs of Westminster; and these were deposited under the windows of the great magnates of the realm—the Norfolks, the Pembrokes, and the Ormonds." "Men died faster in the lanes of our towns than they now die on the coasts of Guinea." Other writers confirm this testimony. The streets were unpaved, with open gutters, cesspools under the houses, stagnant ditches, polluted streams, tainted wells, and the air was contaminated with the effluvia arising from decaying bodies of the dead, interred in close proximity to living urban populations. Mr. Buckle says that the smells in London were so bad that sweet herbs and perfumes were kept in the rooms to neutralise them. Nor were the interiors of our houses much more wholesome than the exterior surroundings. "The floors," says a writer of the sixteenth century, "generally are made of nothing but loam, and are strewed with rushes, which, being constantly put on fresh, without a removal of the old, remain lying there, in some cases, for twenty years, with fish-bones, broken victuals, the dregs of tankards, and impregnated with other filth underneath from dogs and men." The clothing was seldom changed, and pervaded with unwholesome odours; linen was only used by a comparatively few; the food was coarse, and badly cooked; two centuries ago there were no fresh vegetables grown in England, small quantities were imported from Holland for the exclusive benefit of the rich. These were days when the plague, sweating sickness, black-death, remittent fever, small-pox, and all forms of zymotic diseases, engendered by filthy habits and unwholesome surroundings, abounded. Violation of the laws of Nature breeds its own cure through manifold chastisements, but it was not until the severe visitation of cholera in 1831, that attention was awakened in England to the importance of the subject. And in 1848 public opinion had sufficiently advanced to enable Parliament to pass what was called the "Nuisance Removal Act," as well as the "Public Health Act," by which was established the General Board of Health, and thenceforward the furtherance of sanitation became one of the recognised duties of the State. A series of amending Acts of Parliament have been passed relating to the public health, embracing the cleansing of the streets, removal of nuisances, construction of sewers, building of streets and houses, ventilation of public buildings, regulation of lodging-houses, preventing the pollution of rivers, and similar matters, and if the authorities had been content to fight disease by preventive measures of this kind alone, the zymotics might by this time have been deprived of their epidemic power, but, unfortunately, in an evil hour Parliament was induced to listen to a faction of the medical profession, who, unable to obtain the public acceptance of their theories on their own merits, determined to do so by the authority and assistance of the State, and were enabled to force upon everybody a disease called the cow-pox, because, as it had been pertinently said, somebody might catch the small-pox. In 1853 the Vaccination Acts were passed in England, introduced by a private member, and passed without notice or public discussion, and it is no exaggeration to say that a more wretched and obnoxious law has not been foisted on the English-speaking race since the passage of the atrocious Fugitive Slave Law in America thirty-five years ago. Vaccination, which is the spreading of disease, became thenceforward, by a strange perversion of the fitness of things, officially associated with sanitation, which is the prevention of disease.

Several of the diseases I have mentioned have now practically disappeared, without any medical preventive, but solely by the effect of improved sanitation; yet small-pox, which vaccination promised to stamp out, is still raging, notwithstanding the lavish expenditure of millions among the medical profession, and the fell disease is a standing disproof of the Jennerian predictions. Reposing on a State-endowed remedy, which has been insolently called the greatest discovery in medical science, all special investigations into the causes of small-pox have been officially considered superfluous. During the present epidemic in London, June 10, 1881, a member of the English Parliament, Mr. Daniel Grant, asked in the House of Commons whether the Government would appropriate a sum of money to inquire into the causes of the outbreak. The President of the Local Government Board replied that the Board had no funds for that purpose, yet the official Vaccination grants amount to over £100,000 a-year! Were it not for the determination to uphold vaccination at all hazards, the causes of Small-pox would long since have received the same careful attention that the Government devote to the outbreaks of other diseases.

In a recent number of the *Leicester Free Press*, it is said:—"So far as we are concerned in Leicester, a town containing 120,000 inhabitants, with many thousands of unvaccinated children, Small-pox seems to be about the least dangerous of all diseases, and is not to be named by the side of scarlet fever, measles, whooping cough, diarrhœa, or even consumption. If a case of Small-pox is discovered, instant isolation is adopted, and during the last five years we have hardly had five deaths. That being the state of the case, one need not wonder that the fear of the disease should disappear or that resistance to Vaccination should increase."

Dr. Farr, in his official report for 1876, says:—"Experience has shown that the various forms of plague are influenced to a large extent by sanitary conditions. All zymotic diseases are most fatal in the densest districts, and although this may be due in part to contagion, it is certainly due in part to the concentrated impurities of towns." And Professor Playfair says:—"No epidemic can resist thorough cleanliness." Those who have intelligently watched the course of these outbreaks, noted the localities where they have arisen, and the causes by which they are engendered are convinced that it is within the power of Governments by means of scientific sanitary appliances and methods to stamp out small-pox altogether. Supposing vaccination to be abandoned, this revolution would

be brought about, for it is the opinion of many of the ablest opponents of the vaccination question in England that one cause of the perpetuation of small-pox in our midst is the application of this alleged remedy of vaccination. Every one now admits that a considerable portion of vaccination in England is variolation, *i.e.*, small-pox matter passed through the cow, and that what is called vaccination is nothing but modified small-pox. In no part of England has vaccination been so rigorously enforced as in the English metropolis, where, in addition to the energetic efforts of vaccination officers and public vaccinators, stimulated by special awards, there has been inquisitorial house to house, and school to school visitation; the remorseless cow-poxing in the poor houses of infants scarcely a month old; to prevent escape from the lancet, the hunting of unvaccinated fugitives from parish to parish, like slave-hunting in the United States; and the relentless prosecution of the parents of unvaccinated children in every police-court in the metropolis. And what is the result? Has small-pox been stamped out, as all the Jennerian prophets in succession have loudly predicted? On the contrary, in proportion as public money and State machinery have been diverted from sanitation (the only scientific prophylactic of small-pox) to vaccination, or the unscientific treatment by blood-poisoning, the disease has spread with the result shown by the Registrar-General in his annual summary for the year 1880, which tabulates the small-pox mortality of London for the last thirty years as follows:—

Decades.	Estimated Mean Population.	Small-pox Deaths.
1851-60	2,570,489	7,150
1861-70	3,018,193	8,347
1871-80	3,466,486	15,543

The last decade showing an increased Small-pox mortality of 80 per cent. It must not be supposed, however, that this mortality is equally spread over the Metropolis, or that it exists in all classes of habitations alike. In the princely mansions of South Kensington, Hyde Park, and Regent's Park, in the aristocratic districts of Bayswater, Notting Hill, Haverstock Hill, the open and airy slopes of Hampstead and Highgate, in the salubrious suburbs of Ealing, Clapham, South Hornsey, Sydenham Hill, Wimbledon, Chislehurst, and Finchley, cases of small-pox are of the rarest occurrence. The epidemic is found amongst the poor, ill-fed, uncleanly, intemperate, over-worked populations of Hackney, St. Giles's, Bethnal-green, Poplar, Shadwell, Bermondsey, and Southwark, among those who live in the courts and alleys, in old and decayed habitations, and in the miasmatic atmosphere in which the neglected residuum of this immense city are reduced to dwell. Amongst the denizens of these unwholesome districts, will be found the largest proportion of unhealthy children, the offspring of the diseased and vicious, to whom the so-called protection of vaccination is prohibited by official instructions. These children have no vitality to resist small-pox and other zymotic diseases, hence it is that a larger number of the unvaccinated or unhealthy children die of small-pox than the general average. This pretended protection must needs be given, not to the weak and sickly, who most require it, but to those whose physical strength is itself an all-sufficing safeguard.

The *British Medical Journal*, an ardent pro-vaccinating advocate, in its issue of Oct. 23, 1880, says, "It is probable that a larger proportion of unvaccinated persons is to be found amongst the ignorant, dirty, and wretched inhabitants of the slums of London, and very few amongst the educated, and better fed members of society. The disease is much intensified by over-crowding." Thus the highest vaccination medical authority vitiates and overturns the entire fabric of Dr. Buchanan's figures which, both in England and Germany, seemed a few months ago to have galvanised the vanquished Jennerians into a spasmodic vitality. When Dr. Southwood Smith, Mr. Edwin Chadwick, Mr. H. D. Dudgeon, and other leading sanitarians, commenced their work thirty years ago, by showing that filth, bad drainage, impure water, overcrowded dwellings, were the causes of zymotic diseases, the rank and file of the medical profession ridiculed their theories with unsparing scorn. Evidence, nevertheless, as to the truth of the theory and contention accumulated, so rapidly indeed, that had not many of the doctors relinquished their fatuous objections, they must have placed themselves outside the intelligence of the age. The vaccinators yielded to public opinion reluctantly, and so far as small-pox is concerned, many of them still audaciously defend their oft-exploded theories. One of the most striking proofs in support of my contention is that afforded in a letter written by our esteemed friend and colleague, the energetic sanitary reformer, Dr. Oidtmann, illustrating the enormous advantages of sanitation in preventing small-pox in the German invading army, and the dangerous consequences of the neglect of these precautions in the French army, the conditions as to vaccination being alike in both cases. In the *Natur-Arzt*, published at Dresden in 1873, Dr. Oidtmann says:—"In my numerous marches and halts in the campaign of 1870-71, I directed my particular attention to the health statistics. After the taking of Verdun I noticed that the rooms in which the French hospital patients were miserably decimated during the bombardment, were inexpressibly close and ill-smelling—breeding-places of small-pox poison. The only German physician of the garrison being unwell, it fell to my lot to root out these filthy lurking-holes of pestilence. At a later period, after the battle of St. Quentin, I was physician of the garrison staff of that place, and all the statistics of the French, German, and International Hospitals for six weeks in succession passed through my hands. The number of French who, during that time, died in these hospitals of pyæmia (blood-poisoning) and phlegmonia (blood impurities) was so wonderfully great in proportion to the small death-rate of the German hospitals, that the vaccination statistics of your English newspapers can hardly admit of comparison with it. What then was the cause of the 'protection' of our people from these two diseases? Had they been inoculated for pyæmia and phlegmonia? Certainly not. But, whereas in the French hospitals a veritable pest atmosphere reigned night and day,

yet at Abbeville, on the contrary, where we had no French army doctors, and where the arrangements of the hospital were in the joint hands of myself and the medical men of the place, the statistics of recovery from small-pox were highly favourable, and indeed equal for French and Germans. The enormous difference between the small-pox mortality of the two armies, was caused by the crying neglect of hygienic precautions in the French military department, and by the excessive concentration of their system of stationary sick-depôts, as opposed to the freshness of the hygienic arrangements of the German hospitals, and the ambulatory movements of their scattered troops. No more decisive proof can exist of the correctness of my theory—that the strength and spread of small-pox is both proportioned to and progressive with the fostering and shutting in of the small-pox vapour—than these statistics of the Franco-German War."

Proofs of the truth of the value of sanitation are, however, nearer at hand, and a satisfactory demonstration is afforded by the associations in London which have devoted their attention to improving the dwellings of the poor. A wholesome habitation in a crowded district is shown to diminish the death-rate by a third or half, as compared with that of the occupiers of old houses in the same locality. I have before me a report of the thirty-sixth half-yearly meeting of the Improved Industrial Dwellings Company, held at the Mansion House, London, August 5, 1881. This association controls 3,681 tenements or habitations (with a population of 18,000 persons), nearly all of which are located in the denser parts of London, and the mortality is only 16·7 per thousand, while the death-rate of the adjoining houses is 30 to 35. Although the report is for a year when there was a severe epidemic of small-pox, the secretary, Mr. James Moore, informs me that only one death from that disease occurred. The thirty-seventh report of another, the Metropolitan Association for Improving the Dwellings of the Industrial Classes, read June 6, 1881, gives the death-rate of an average population of 5,675 at 15·5 per thousand. And as the average mortality of the entire Metropolis is 23 per thousand, there has been a saving of life of 7 or 8 per thousand. In the last-named association there has not been one death from small-pox during the past ten years, while the surrounding habitations have often been the hot beds of contagion. An equally satisfactory result has been achieved by the Victoria Dwellings Association, which has been in existence six years. Their buildings are situated at King's Cross, a crowded centre of the Metropolis, and at Battersea, one of the outlying suburbs. The average population has been 2,500, out of which only twenty-four deaths occurred during the past twelve months, or less than half the Metropolitan death-rate, and not a single death from small-pox since the association was formed. The facts prove the truth of my contention, that sanitation is sufficient to prevent and stamp out all zymotic diseases, including small-pox, and even if it could be shown that vaccination would do the same, it is nevertheless wholly unnecessary. Earl Spencer, in opening the Sanitary Exhibition in London, on July 16, said that already in Great Britain the death-rate had been so much diminished during the past ten years that 300,000 lives have been saved, as compared with the previous decade, and this was largely due to improved sanitation. An official report on the sanitary condition for 1881, says that more than three-fourths of the reduction is due to the decrease of severe zymotic diseases, the product of filth, which good sanitation can remove.

It seems clear, therefore, from the foregoing facts, that small-pox can be extirpated by means of sanitation alone, a remedy which, besides being absolutely efficacious, can be adopted by municipalities and by individuals with the certainty that it is attended with none of the dreaded evils inseparable from the compulsory injection of lymph of doubtful origin and unknown virulence and power. The testimony of Dr. Farr and Prof. Playfair, both pro-vaccinators, and the evidence deduced from the death-rate of the various improved dwellings associations, leave Governments without excuse for continuing a system which, besides being of non-effect as a preventive, is the cause of ineradicable mischief. Compulsory medicine, according to the testimony of Mr. MacLaren, the late Lord Advocate for Scotland, and other high authorities, is opposed to the ancient constitution of England, and is, therefore, a gross infraction of the liberty of the citizen and of parental rights. The work of this Congress is to assist in restoring the birthright of our citizens, to give back to the parents their highest duty and privilege—the sacred right to protect and defend their offspring from evil, and to liberate the oppressed of many nations from an ignorant, unjust, and indefensible tyranny. The laws which I arraign are omnipotent, but being founded on injustice, must ere long crumble before a growing public opinion, which now demands, and will soon compel, their unconditional repeal.

LETTERS RELATING TO THE COLOGNE CONGRESS.

From Dr. Westermeyer, Member of the German Parliament (Reichstag), and Ecclesiastical Councillor and Minister, and co-reporter on the Vaccination Commissions.

Munich, Sept. 27, 1881.

Most Honoured and Learned Gentlemen,—The Secretary of the Second International Anti-Vaccination Congress, Dr. Oidtmann, of Linnich, has sent me an invitation to Cologne, on the 9th to 12th October. Flattering as is the invitation, I shall be unable to attend.

You, gentlemen, assembled at Cologne, will (from the point of view indicated in your circular) investigate the question of vaccination and of compulsory vaccination with the scientific thoroughness that is to be expected from so worthy an assembly, and you cannot fail to impress your opponents, and beyond all the confederate Governments of Germany, and especially the Chancellor of the Empire.

If the Congress is able to demonstrate that vaccination is a delusion like its predecessor inoculation, it will, like it, have to be made penal. If, however, the facts prove that vaccination affords a certain measure of protection, its prohibition could not be demanded. Nevertheless, if even some degree of protection were admitted, the right to

enforce vaccination would still have to be denied; and the more so if the Congress can produce statistical evidence that the mischiefs of vaccination far exceed its possible benefits.

Wishing you success alike in the interest of science and public welfare, with sincere sympathy, I am, gentlemen, yours most respectfully,

WESTERMEYER.

From MR. L. M. KEUCHENIUS, M.P., Holland.

The Hague, Oct. 10, 1881.

DEAR SIR,—In answer to your invitation, let me say that in our country we have only *indirect* compulsion. By the Contagious Diseases Law, no one who is unvaccinated is permitted to keep or to attend any public school. Opposed to this enactment are all the members of the anti-revolutionary party in Parliament to which I belong.

Recently the Committee of Provincial Medical Inspectors advised the Minister of the Interior to make vaccination obligatory by law; but I am assured no Government will even attempt to comply with their wishes. On the contrary, I expect that indirect coercion will be withdrawn in the course of a few years.—Yours faithfully,

L. M. KEUCHENIUS.

To Wm. Tebb, Esq.

AN AMERICAN NOTE ON THE COLOGNE CONGRESS.

IN view of the statements made at the recent Anti-Vaccination Congress held at Cologne, the layman may well ask whether there is anything in medical science that he can safely regard as settled. A few years ago the whole world believed vaccination to be an efficacious preventive of small-pox just as firmly as it believed quinine to be a good remedy for chills and fever. But now arise a host of earnest and honest people who assert that vaccinated persons are more liable to the contagion of small-pox than the unvaccinated, to say nothing of the other forms of blood-poison which they may absorb with the virus. But this is not the worst of it. These agitators do not rest upon assertions. They have an appalling array of hospital statistics to back up their position. As far as figures go, and figures must in the end settle the question, it must be admitted that, up to this time, they have the best of the controversy they have provoked. Meanwhile, why should the discussion be confined to England and the Continent of Europe? Let us have an intelligent examination of our American hospital reports. If the anti-vaccinationists are right, the sooner the public know it the better; if wrong, the sooner their error is established and the painful doubts they have awakened are set to rest, the better.—*New York Tribune*, Nov. 18, 1881.

REPEAL OF COMPULSION IN GERMANY.—Dr. Oidtmann writes in encouraging terms to Mr. Tebb as to the progress of the cause in Germany. The immediate concern of our German friends is to secure precedence from the Commission on Petitions for the question in the Reichstag. "We are thoroughly prepared," says the Doctor, "for the debate in the Reichstag, where we have a majority, and with it we shall triumph. So far as relates to Germany, we shall not, I believe, have need of another Anti-Vaccination Congress."

IGNORANCE AND CRUELTY AT SALFORD.

"THE hardest case under the Vaccination Laws which we have yet met with," says the *Echo*, "is that of Mr. Thomas Rhodes, of Salford, who has been fined 5s. and 11s. costs, although he produced the following certificate from a doctor:"—

"I certify that I vaccinated T. L. Rhodes, the child of Thomas Rhodes, in the month of May and again in July. On both occasions there was no resulting vaccine pustule. The child was vaccinated a third time on Nov. 3, and again without any result, owing to some constitutional insusceptibility to the influence of vaccine lymph.

"Dec. 8, 1881. "RALPH M. LEDWARD, M.D."

"Have the doctors a right," inquires the *Echo*, "to puncture periodically a poor child's arm without limit?"

Certainly not. Infamous as are the Vaccination Acts, there is a limit to their wickedness at the point in question. In the Vaccination Act, 1867, Sec. 20, it is provided that, "If any public vaccinator or medical practitioner shall find that a child whom he has three times unsuccessfully vaccinated is insusceptible of successful vaccination, he shall deliver to the parent a certificate under his hand to the like effect, and the parent shall thenceforth not be required to cause the child to be vaccinated."

Mr. Rhodes, therefore, has been unlawfully fined. Dr. Ledward should have delivered to him the prescribed certificate, and, on the evidence adduced, the magistrate should have deferred the case for its formal production.

We have here another instance of the ignorant and fanatical administration of what is supposed to be law. We are constantly hearing of penalties inflicted and submitted to that are entirely irregular; and when such gross ignorance and cruelty are displayed from a bench like that of Salford, it is easy to conceive what vaccination zealots in authority perpetrate in less conspicuous situations.

TAKING THE SHILLING.*—Under this title we have the story of Roger Taylor, a stalwart young blacksmith, who in a fit of temper enlisted in the army, was vaccinated in spite of his own fears, was invalided, and finally suffered amputation of his arm, returning to his village at the end of a few weeks, a maimed object for life. It is a painful narrative, and is justified by the author as matter-of-fact.

MR. ALFRED E. GILES, of Hyde Park, Massachusetts, has published a pamphlet entitled "The Iniquity of Compulsory Vaccination, and the Unconstutionality of its Statutes," in which he discusses the Question from the American point of View. We have had frequent occasion to note Mr. Giles's correspondence in the New England press, and always with admiration for the tact and cogency with which he conducts his argument.

* "Taking the Shilling: a Tale of Village Life." (Founded on fact.) Dedicated to the Prime Minister and the Naval and Military Authorities.—(E. W. Allen, 4, Ave Maria-lane.) Price 2d.

MEDICAL ORTHODOXY.

Tune.—THE VICAR OF BRAY.

WHEN first the small-pox scare did raise
In all men's minds a ferment,
We doctors saw the people's craze
Would bring to us preferment.
To teach the public we ne'er miss'd
That we could save the nation;
But lost were all who should resist,
Or shun inoculation.
And this is law, as will maintain
Each "qualified M.D.," sir;
For whatsoever "fad" obtain,
I still will have my fee, sir.

When Jenner next obtain'd renown,
And cow-pox came in fashion,
My former faith I hooted down
With scientific passion.
All might be saved who would but use
His cow-pox vaccination;
But damn'd were all who dared refuse
Their bodily salvation.
And this is law, &c.

But when the immortal Jenner found
That cow-pox would not do, sir,
And swore by horse-grease, I turn'd round,
And swore by horse-grease too, sir.
Yet "pure calf-lymph" we call'd it still,
To ease the nation's terrors;
For "Science" will her pockets fill
By simple people's errors.
And this is law, &c.

One vaccination would remain,
We said, through life sufficient;
But when the small-pox raged again,
And proved it inefficient,
I swore, with all the faculty,
The fault lay with the nation,
Till they our fees should double by
Adult re-vaccination.
And this is law, &c.

Yet, since men's faith doth fast abate,
A new dodge doth inspire us;
And now we do inoculate
Pure calves with human virus.
And "Science," through the great Pasteur,
With heresy doth battle,
And with the filth men won't endure
Befouls the sheep and cattle.
And this is law, &c.

What though fresh epidemics show
The faculty has blunder'd,
One thing, at least, they surely know—
The people must be plunder'd.
And in my faith and loyalty
I'll never, never falter,
But swear as swears the faculty,
Till they themselves do alter.
And this is law, as will maintain
Each "qualified M.D.," sir;
For whatsoever "fad" obtain,
I still will have my fee, sir.

THE HEALTH CONGRESS.

THE Brighton Health Congress just concluded cannot fail to push forward the work which sanitation is doing in our midst. In spite of all the preaching (of which we have had enough and to spare of late) as to the inadequacy of sanitary measures to control zymotic disease in general, and small-pox in particular; in spite of the pernicious, though wide-spread, doctrine that man is naturally prone to disease, unless he have purchased immunity by previous attack, the work of sanitation is steadily and surely progressing, while the wisdom of a law which designedly diseases the whole infantile population is being daily called in question. Those who venture to doubt the virtues of vaccination are often assailed with the interrogation, What, then, is your remedy? What can you suggest as a substitute? It is a poor retort at best, but it is a justifiable one, and one that has been repeatedly and satisfactorily answered. Dr. Alfred Carpenter, in his address at Brighton, observed, "if anti-vaccinators were as energetic in their promotion of sanitary reform as they were in antagonism to vaccination, they would be doing some good in the world, and assisting to bring about a state of things which would render vaccination altogether unnecessary." Dr. Carpenter must be ignorant, indeed, of the sayings and doings of anti-vaccinators, if he does not know that that is exactly what they have always been aiming at; that tantamount with their distrust of vaccination is their belief in sanitation, and their desire to promote its ends.

Vaccination may or may not protect against small-pox, but at any rate, the theory on which it rests is a provisional theory, after all; it does not strike at the root of disease—nay, rather accepts it as a necessity, and following a Jesuitical line of argument, counsels a compromise with disease in order to avoid it. Sanitation takes a higher ground; if health be, as it is said to be, the antithesis to disease, then surely the nearer the body approaches the state of perfect health, the further it is removed from those conditions under which diseases arise and spread; or in the words of Dr. Carpenter, "Those who are freed from unnatural conditions by acting in accordance with the principles of public hygiene, need not fear the pestilence that walketh in darkness, nor the sickness that destroyeth in the noon-day." The anti-vaccinator, then, is the sanitarian too; his work is not destructive only, but constructive also.

The law compelling vaccination will be repealed, not so much by assailing it with unmitigated abuse, nor by piling up innumerable facts to disprove the premises on which it is founded (valuable though these may be), as by endeavouring to show the people what a far better thing sanitation is, and teaching, with Dr. Richardson, "that the simplest means are all that are demanded for the removal of the most fatal of human foes." The fact of there being a necessity for vaccination (supposing it to be effective) exposes a state of things which is a scandal to society, and which, accepting the doctrines laid down at Brighton, and the teachings of Pasteur, can be altogether abolished by sanitation alone.

Dr. Richardson complains that "the health of

our children is our reproach;" he has never seen a healthy child. Some might be disposed to attribute this more or less directly to our vaccination system; at any rate, it is unreasonable to expect that their diseased condition is likely to be improved by their inoculation with "we know not what." If the "early life of our children were made a seed-time of health," and not of the germs of cow-pox, or any other "alternated virus," the Golden Age which science promises and sanitation can bring about may be something better than a dream. W. J. C.

SIR RICHARD PHILLIPS says:—"The history of all popular States, as well as our own observations, prove that every enormity has received, and does, and may receive the ready and unrelenting approval of mere majorities."

PRICE OF VACCINATION.—Dr. W. B. Carpenter thinks half-a-crown cheap for public vaccination, but apparently much more is sometimes got for the job. Dr. Simpson recently summoned the Dover Guardians for £38. 18s. for 137 vaccinations performed in the workhouse, and obtained judgment for the full amount claimed. He had therefore not 2s. 6d., but 5s. 8d. per head.

RICHARDSON *versus* PASTEUR.—What will M. Pasteur and the rising school of inoculationists say to the challenge thrown down to them by the President of the Sanitary Congress at Brighton? They would combat infection by means of inoculation, so as, by giving diseases in a mild form, to destroy their harmfulness when they choose to attack the human frame. Dr. Richardson unmistakably shows the more Utopian side of his doctrines when he brands this kind of remedy as a "desperate device" and "a new conceit of prevention." His own standpoint, in opposition to all such views, would rather be that this manufacture of diseases in human, bovine, equine, and canine species is quite unnecessary, when we know that "perfect purity of life is all-sufficient to remove what disease exists, without invoking what now is not." At present we have not arrived at a scientific knowledge of what it is which constitutes such a disease as small-pox or scarlet fever. Vaccination or inoculation is merely a temporary expedient, adopted by medical art, until the time comes when we are able to attack the very germs of these dreadful maladies, and of others like them.—*Daily Telegraph*, Dec. 14.

HOSPITAL *v.* HOME TREATMENT.—A very unpleasant statement was made by the medical member of the Liverpool Health Committee, which will not tend to remove the objections entertained by sufferers from infectious diseases to their removal to public hospitals. He said that during a recent small-pox epidemic in Liverpool, out of 1,660 cases attended at their own homes, there were only 138 deaths; while out of 314 who were removed to hospital, 161 died. Even after making a liberal allowance for the more serious nature of the cases removed to the hospital, the disproportion between a mortality of 51 per cent. in hospital and only 8½ per cent. at home is excessive. Of course, it will be said that though half the patients died, their removal prevented the disease spreading. That argument carried to its logical conclusion would justify us in treating small-pox like cattle-plague. A poleaxe is even more efficacious than a small-pox hospital for stamping out infectious disease.—*Pall Mall Gazette*, Dec. 7.

THE *DAILY CHRONICLE* ON VACCINATION.

IT is simply humiliating to observe the utter ignorance—the profound prejudice—the brutal intolerance, exhibited by a Liberal newspaper which aspires to teach and humanise the public mind. The *Daily Chronicle* of Dec. 3 illustrates the exclamation of Oxenstiern, "See, my son, with what little wisdom the world is governed!"

Let the public see for themselves:—

D. C.—"After all that has been ascertained as to the vast benefits that have accrued to mankind from vaccination."

Answer.—Statistics show that vaccination does not protect against small-pox. Nay, that since it was made compulsory, small-pox has enormously increased.

D. C.—"And after the crucial tests to which the prophylactic has been subjected among nurses in small-pox hospitals."

Answer.—The old falsehood. Most of the nurses have previously had small-pox, and it is not true that none of them take that disease.

D. C.—"Minds of this kind may be left to indulge in their own convictions, but the law must be enforced, particularly as the disease at present prevails to so great an extent. A man may risk his own life by remaining unvaccinated, but he has no right to endanger that of his neighbour."

Answer.—As, according to the *Chronicle*, it is impossible for any one who has been "protected" to take small-pox, even when exposed to the maximum danger of hospital contagion, how can the non-believer endanger his neighbour?

D. C.—"It requires more than ordinary patience in dealing with the crotchets of those who obstinately refuse to be convinced either by arguments or results. There is no theory, however absurd, which will not be believed in by a certain number of people; no imposture, however transparent, that will not impose upon a great many persons."

Answer.—The editor of the *Chronicle* here accurately describes his own position as to vaccination!

D. C.—"It is not at all surprising, however, that the operation of the Act should so frequently be evaded, when we find from a letter in a contemporary that a certain association antagonistic to vaccination sends out printed cards to parents whose names and addresses appear in the columns of the newspapers headed 'Births.' These cards are supposed to place before the recipients arguments in favour of not complying with the law. We need hardly point out the grave impropriety, to use no stronger expression, of such proceedings, and we trust that means will promptly be taken to put an end to this abuse of postal privileges."

Answer.—Well done, Leader of Liberalism! The free expression of an opposite opinion to that held by the *Daily Chronicle*—held, as its language proves, without inquiry or information, is a "grave impropriety" and an abuse of "postal privileges."

How does it happen that the respectable proprietor of a respectable journal should endanger his reputation for Liberalism, decency, and common sense by placing his columns at the disposal of some prejudiced quack?

AN AMERICAN EXPERIENCE.

In a letter to Mr. Wm. Tebb from Mr. A. E. Giles, of Hyde Park, Massachusetts, he says:—

"As I was looking over a little book published in Philadelphia in 1876, entitled 'Opium Eating: An Autobiographical Sketch,' I came upon the following observations, which I transcribe for the VACCINATION INQUIRER. The author was a soldier in the Union Army, and in the autumn of 1863, when about eighteen years of age, was captured by the enemy and confined with many other prisoners at Danville, in Virginia. He writes:—

'During the time we were at Danville we suffered considerably from cold and close confinement. Small-pox broke out among us, and attacked a great many, but in most cases in a mild form. Those afflicted had it as violently as could be expected under the circumstances, their systems being in such a depleted condition that the disease had nothing to feed on. In fear of it, and to prevent it, many were vaccinated. I was not, and I thank Providence that I was not, as I knew some to suffer worse from vaccination than they could have done from small-pox, even when it terminated fatally; for cases of vaccination did terminate fatally, and often with more suffering than from the dreaded disease itself. The vaccine virus proved to be poisonous in some instances. I knew a man whose left arm was eaten to the bone by it, the bone being visible, and the cavity, which was circular, was as large as an orange. After months of excruciating pain the man died. Sometimes even vaccination did not prevent small-pox. A man with whom the writer bunked was vaccinated, and it took uncommonly well, a very large scab developing on each arm. Yet this man took small-pox, and badly, while the writer remained perfectly free from it, although he had not been vaccinated for thirteen years; had been exposed to the disease in almost every way; had slept with his comrade while taking it, and after he returned from the small-pox hospital with the eruption but partially healed. I thought if I must have it, I must, and there was an end of the matter, there being no way of avoiding it that I could see; and I do not know but that vaccination while the small-pox was about increased the danger by throwing the men's blood into a fever; while by leaving the blood undisturbed the chances of taking it were at least not augmented.'

"The author was afterwards confined at Andersonville and Goldsboro, where his health was much impaired by privation and exposure. These preliminary experiences are related as showing how he became an opium consumer, into which practice he was inducted by a physician."

INSTRUCTIONS FOR M.P.'s—I think deputations to candidates and members of Parliament for discussion of the vaccination question would be very useful. The ignorance of many of them on the subject is incredible.—D.

THE MEMBERS FOR BIRMINGHAM.

THE following is a copy of a letter addressed by Mr. Crane to Mr. Bright, Mr. Chamberlain, and Mr. Muntz:—

Quadrant-chambers, New-street, Birmingham,
Nov. 22, 1881.

SIR,—I take the liberty of enclosing for your perusal a cutting from the *Birmingham Daily Post*, containing a report of a conviction under the Vaccination Acts, obtained at Aston on the 18th inst., against Mr. J. W. Mahony, from which you will see that he conscientiously and persistently refuses to have his three children vaccinated, and has already appeared before the magistrates nine times for the offence. I am informed that for these three children he has paid in fines and costs no less a sum than £7. 17s. 6d., with the result that they are still, and will ever remain, unvaccinated. I wish most respectfully to draw your attention to the harshness and inequality of the said Acts, under which repeated prosecutions are possible for the same offence; to which men with money avoid compliance, while men without money must either comply, or suffer distraint or imprisonment. Seeing, then, that these Acts do not really enforce vaccination, and that they affect the poor so much more oppressively than the rich, I beg most earnestly and respectfully to inquire whether you are willing to support the repeal of the penal clauses of the said Vaccination Act? I have the honour to remain, yours faithfully,

JOHN CRANE.

Answer from the RIGHT HON. JOHN BRIGHT, M.P.

Kelso, N.B., Nov. 25, 1881.

DEAR SIR,—I think the imposition of repeated penalties is very harsh, but I fear the feeling in Parliament is not in favour of greater mildness in the administration of the law.—I am, respectfully,

JOHN BRIGHT.

Mr. John Crane.

Answer from the RIGHT HON. JOSEPH CHAMBERLAIN, M.P.

Highbury, Moor Green, Birmingham,
Nov. 25, 1881.

DEAR SIR,—I am desired by Mr. Chamberlain to acknowledge the receipt of your letter of the 22nd inst., with an enclosure. Although Mr. Chamberlain is quite unable to agree with the views of those persons who believe that vaccination is ineffectual in preventing the spread of disease, and does not share their fears of injurious consequences; yet he can sympathise with the feelings of conscientious parents, who, holding these opinions, are prosecuted under a compulsory law, for not doing what in their hearts they believe to be a harm to their children. You are probably aware that the Government did bring in a Bill to restrict the practice of imposing cumulative penalties, but the opposition in the House of Commons was so great that they were unable to proceed with it. The question is one for public discussion and for decision among the constituencies.—I am, yours obediently,

WM. WOODINGS.

Mr. John Crane.

Answer from P. H. MUNTZ, Esq., M.P.

Somerset House, Leamington, Nov. 30, 1881.

DEAR SIR,—In reply to your letter, I beg to say that I am not willing to vote for the repeal of laws that have proved of inestimable value to the human race.

If men are so unwise as wilfully to disobey the laws of their country, they must abide by the result, rich or poor.—Yours faithfully,

J. Crane, Esq. P. H. MUNTZ.

THE FUTURE OF INOCULATION.—*Punch*, of Nov. 19, has a woodcut by Du Maurier, representing a dispensary, with jars labelled Small-Pox, Diphtheria, Scarlatina, Tetanus, Ague, Typhus, Mumps, and Measles, with a doctor and a lady come to buy. Says the customer:—

"My nephew is just starting for Sierra Leone, and I thought I could not make him a more useful present than a dose of your best Yellow Fever. Would you tell me the price, please?"

To which the chemist replies:—

"Well, Ma'am, the Germs are so difficult to cultivate in Europe, that I would advise your waiting for the next West Indian Mail, when I am expecting a nice fresh consignment from St. Thomas. Meanwhile, we would recommend our half guinea Travellers' Assortment of the six commonest Zymotics, and could add most of the Tropical Diseases from stock at 5s. each. We have some nice Asiatic Cholera, just ripe; but they are more expensive."

DAMNED WITH FAINT PRAISE.—Dr. D. H. Cullimore, physician to the North-West London Hospital, in a letter to the *Echo*, of Oct. 29, observes:—"I have lived in India several years, and have been medical officer to some of the largest civil districts in Southern India and Burmah, and my experience—founded mainly on examination of large numbers collected in famine camps—is that diseases of the skin are infinitely more prevalent in England than in India. . . . . I have seen enough, however, of small-pox in that country to shake my belief in vaccination as a panacea, to which the individual responsibility of a reluctant people should be made subservient. There is one point of considerable importance. Among the advocates of Compulsory Vaccination, when a case of mild or discrete small-pox follows vaccination, it is proclaimed as at least a partial victory for the latter, whereas, in all probability, it has nothing to do with it. Cases of the mild type were in the majority (except in specially severe epidemics, which still occur) before vaccination was ever heard of; and I have myself seen in India, during the late famine, hundreds of cases of this mild form that had never been vaccinated, the only medicine being buttermilk and pure air; while, on the contrary, I have occasionally seen confluent small-pox with dangerous purulent fever when vaccination has been successfully performed. Withal I am, however, of opinion that the benefits likely to follow vaccination so exceed the dangers incident to it, that we should be foolish to disregard them. This is, of course, a very different matter from rendering it compulsory, particularly among a people so socially and religiously constituted as the various masses that form our Indian Empire."

THE INGENUOUSNESS OF OFFICIAL REPORTS.

THE Quarterly Report of the Registrar-General for July, August, and September last (No. 131), informs us that out of the 674 small-pox deaths in England and Wales, 461 occurred in London; and goes on to state that 37 per cent of these were certified as vaccinated, and 62 per cent. *certified* to have been unvaccinated. (The value of such certificates is not estimated). Persons who read this report in a cursory manner, without reference to the figures and localities, are left free to infer that these small-pox deaths may have been pretty equally spread over the whole area of the Metropolis. Those who examine for themselves, however, may discover that six only out of the 29 Superintendents' districts, furnished no less than 391 of the 461 deaths—Greenwich, 153; Hackney, 96; Fulham, 59; Islington, 37; Lambeth, 29; and Poplar, 17; whilst of the remaining 70, 43 occurred in the six other districts of St. Olave—Southwark, 11; Mile End Old Town, 9; Camberwell, 7; Bethnal Green, 6; Shoreditch, 5; and Wandsworth, 5; thus leaving 27 of the entire 461 to be supplied by Kensington, Chelsea, St. George, Hanover-square, Westminster, Marylebone, Hampstead, Pancras, Whitechapel, St. Saviours, Lewisham, and Woolwich, whilst in three districts not one was registered. It may, perhaps, be said that in some of the six first named districts there are Asylum Board Hospitals. If so, it only proves that the patients were paupers. It will be seen that low-lying localities furnish the chief proportion; nevertheless, wherever the wealthy have been persuaded to pay a fee for re-vaccination, their escape has, no doubt, been sedulously assigned to that operation as the reason.

The same report mentions that "a localised outbreak, causing 9 deaths, occurred in the sub-district of Wokingham." Having made inquiry in the neighbourhood, we are able to state that five of these deaths were in a low-lying district of one parish, all of whom had been vaccinated, and two of them re-vaccinated a fortnight prior to their death by small-pox, probably thus communicated to them. Nor were any of the remaining four alleged to have been unvaccinated; whilst from the consequent silly re-vaccination panic several persons were made seriously ill, and one death, at least, if not more, resulted directly from the operation, without the aid of small-pox.

CLERICAL COURTESY.

THE Rev. S. D. Campbell writes to Mr. Young:—

"Mr. Campbell will feel much obliged if the senders of the enclosed will keep such ignorant, illogical, and mischievous circulars for circulation among harmless lunatics within the London asylums.

"Leney, Westmeath, Dec. 15, 1881."

NEARLY FORTY YEARS AGO.—We are sorry to announce the extensive prevalence of small-pox at this time among us. REVACCINATE, REVACCINATE, say we.—*London Medical Gazette*, Aug. 2, 1844.

IMMUNITY OF NURSES AND DOCTORS.

In a letter in the *Manchester Examiner* of Dec. 22, Mr. Enoch Robinson thus argues the question of the immunity of nurses and doctors from small-pox, as asserted by Dr. Tomkins:—"In attributing the immunity of nurses and medical students to vaccination, Dr. Tomkins commits the common mistake of drawing a sweeping conclusion from a few isolated facts. The following consideration will expose the fallacy of his argument:—The highest annual death-rate from small-pox in the last century, before vaccination was practised or known, was 3,000 per million of the population. It has been estimated that six cases of the disease occurred to each death, making 18,000 cases of small-pox per million. Subtract 18,000 from one million, and we have 982,000 persons untouched by the disease. Small-pox is not more infectious now than in the last century. Until Dr. Tomkins can tell us to which of these two divisions of the population the nurses and students belong, whether to the 982,000 or to the 18,000, it is impossible for him logically to say that vaccination was the cause of their immunity. By vaccinating 97 per cent. of the population, vaccination gets the credit of saving from small-pox the 982,000 per million who under no known circumstances would have been touched by the disease. Dr. Tomkins asks the opponents of vaccination for facts as startling on the other side. The results of the daily exposure of medical men to diseases more infectious than small-pox are a positive answer. Scarlet fever is the most infectious of the zymotic diseases; small-pox occupies the fifth place. How many medical men die annually of scarlet fever? They are not protected against it by the inoculation of an animal disease. Neither in my student's days at Guy's Hospital, nor in the twenty years I have been in practice, have I known a student or practitioner die of scarlet fever, and I cannot call to mind a single case of one suffering from the disease. Will Dr. Tomkins explain this immunity? If his doctrine were true, medical men, in the presence of the highly-infectious disease of scarlet fever, would be swept off the face of the earth."

VACCINATION AND ERYSIPELAS.

The Globe, Dec. 21, 1881.

As it is highly desirable to deprive the anti-vaccinationists of even the faintest show of reason for their pernicious agitation, it would be well for the faculty to determine whether any constitutional disposition ever exists favourable to the development of erysipelas after the vaccinating operation has been performed. In a case which has just come before the Manchester coroner, the medical evidence clearly proved that the infant owed its death to this cause. The operation appears to have been properly performed, and the child was in a good state of health at the time, but erysipelas set in and resulted in death. Four years ago, another infant in the same family died through precisely the same cause, and the foreman of the jury also deposed that he once lost a child under similar circumstances. We may assume, therefore, that such unfortunate occurrences, although very rare, compared with the immense number of operations performed, are frequent enough to prejudice the less-educated portion of the community against vaccination. The large number of lives saved by its instrumentality are forgotten in presence of the palpable fact that a few are sacrificed. Medical inquiry should, therefore, be addressed to the question as to whether more effectual means cannot be adopted for the prevention of erysipelas. In the case in question, the father of the deceased infant had strongly protested against its vaccination, on the ground of his previous loss through that instrumentality, and he will now say, of course, that the law forces people to sacrifice their children for the general good.

[According to Jenner, erysipelas was the test of true and effective vaccination. Vaccination without erysipelas is what our new cow-pox impostors undertake to provide.—Ed.]

MISTAKEN PROSECUTIONS.

The Shoreditch Guardians have recently been more than usually active in prosecuting anti-vaccinators, but with more zeal than knowledge. A number of cases were brought before Mr. Bushby, at Worship-street, and all dismissed, because the children in question were beyond the age of fifteen months. The Act allows a period of twelve months in which proceedings must be taken if the child has not been vaccinated within a precedent period of three months. In the Vestry, Mr. Belstead accused the Guardians of wasting the ratepayers' money in such abortive proceedings. He stated that he had written to Sir William Harcourt, directing attention to the fact that James Watson had been illegally summoned and convicted, and that the Home Secretary had replied that the fine would not be enforced. Mr. Deacon thereon charged him with falsehood, saying he could produce no such letter. Mr. Belstead thereon declared that if he could *not* produce the letter, he would pay £50 to the London Hospital, if Mr. Deacon would give £50 to the Hospital if the letter was produced. The challenge was accepted, and here is the letter:—

"Whitehall, Nov. 24, 1881.

Sir,—With reference to your letter of the 9th inst., I am directed by the Secretary of State to acquaint you that he learns, on inquiry, that the summons in the case of James Watson was informal, having by mistake been taken under the 29th sec., instead of the 31st sec., of the Vaccination Act of 1867, and the fine will therefore not be enforced.—I am, sir, your obedient servant,

A. F. O. Liddell.

Mr. H. Belstead,
Highbury New Park.

Mr. P. A. Taylor's Reply to Dr. Carpenter.—We beg to call the especial attention of our readers to the issue of a second hundred thousand of this masterly indictment of vaccination, and to invite them to renewed exertion in promoting its circulation. Wherever the pamphlet is read it produces conviction, and it remain unanswered, because unanswerable.

A GOOD PRECEDENT.

AT the Guildhall, Norwich, on Dec. 16, before S. Reeve (chairman), J. D. Smith, A. Master, W. J. Utten Browne, and G. Barnard, Esqs., Charles Lincoln, rivetter, was summoned for neglecting to have his child, Robert Charles, vaccinated within three calendar months after its birth. Mr. J. Cross supported the information, while Mr. Burgess and Mr. Lee Bliss were present on behalf of the Norwich Anti-Vaccination Society. The father said the reason the child had not been vaccinated was because he had a great objection to vaccination. He saw a case in a Norwich newspaper the other day of a doctor having certified that a child had died from the effects of vaccination.

Mr. Browne—Did he give a certificate that a child died in consequence of having been vaccinated?

Mr. Burgess—Yes, sir.

Mr. Browne (to Mr. Cross)—Is this statement correct?

Mr. Cross—Mr. Mills has given a certificate as mentioned, but it is no excuse for the defendant. For where one child dies from vaccination, thousands of lives are saved.

The Chairman—We want to treat those persons who act in good faith differently from those who defiantly break the law. If I believed that vaccination would injure my child, I am not prepared to say what I should do; but all my children have been vaccinated, because I believe it is to their interest. But even if I did not agree with it, the law steps in and makes vaccination imperative. The only course that can be adopted is to get the law altered. It is no business of the magistrates whether the law is good or bad; they are bound to carry it out. No human being can possibly approve of all the laws on the statute book. The usual course is to inflict a small penalty for the first offence and a heavy one for the second.

Mr. Cross—Not always so. Some have been fined a pound in the first case, while others have been fined only a shilling.

The Chairman—I never fined a man a pound the first time he was summoned.

Mr. Browne—The amount of the fine depends upon the circumstances of the case.

The Chairman (to the defendant)—The magistrates are bound to carry out the law, and you will be fined 5d. and 9s. 7d. costs. If you do not pay, the sum will be levied by distress.

Mr. Burgess—The Society is ready to pay the money.

Mr. Browne—You must pay it directly.

Mr. Burgess immediately complied with the request.

This fine is the lowest that has been inflicted by any Bench of magistrates in England for non-vaccination.

"DIED OF STENCH!"—How often shall that be, in plain words, the verdict passed by coroners' juries in the crowded parts of London? There seems to have been nothing astonishing about the inquest held over the body of a baby in one of the courts leading out of Long-acre, except that the jury, after hearing evidence to the effect that the child was poisoned by "a stench which was continually arising from the yard," and that "the place was totally unfit for human habitation," added to the formal verdict a mild recommendation "that the medical officer be communicated with in reference to the drainage and sanitary arrangements of the house in question." We want something more than mild "recommendations" to lessen the murder-rate for which landlords' greed, and workmen's carelessness, and public apathy are responsible.—*Weekly Dispatch.*

EXPERIENCES WITH SMALL-POX.—At a discussion on vaccination opened by Mr. W. Young before the Argyle-square Church Mutual Improvement Society, on Nov. 29, Mr. Emery remarked that in his opinion the danger of small-pox infection had been much exaggerated, and stated that some eleven years ago his wife had an attack of small-pox. At the time she was suckling a baby eight months old, and continued to do so throughout. The baby, although unvaccinated, did not contract the disease. Mr. Fairchild stated that he had no faith in vaccination, believing that attention to sanitation and a just regard to the laws of health were far more reliable barriers against the spread of small-pox than poisoning the blood with vaccination. Like Mr. Emery, his experience showed him that vaccination was useless. He had had eleven children; one of these had been vaccinated, whilst the remaining ten had not, yet the vaccinated one was the only one who had suffered from small-pox.

TRUTH FOR ONCE.—Another case of death from vaccination has just come to light in Norwich, and this time the facts are so simple that it is impossible for the interested supporters of vaccination to explain them away. William Larwood was the father of the child in question, which was born on March 21 of this year, and which died, as the following certificate testifies:—"I hereby certify that I attended Arthur Larwood, whose age was stated to be 8 months; that I last saw him on the 29th day of November, 1881, at Rupert-street; and that, to the best of my knowledge and belief, the cause of his death was as hereunder written, namely, Vaccination. Witness my hand this 29th day of November, 1881. R. J. MILLS, M.B., All Saints'-green." From inquiries we have made, it appears that the child, Arthur Larwood, was a fine, healthy boy just prior to his being vaccinated on Oct. 25, at the surgery of Dr. Guy, on St. Andrew's Plain. Two days after the operation was performed the child commenced to be ill, and gradually got worse, until death put an end to its sufferings on Tuesday last—just five weeks after vaccination. We have viewed the dead body, and can furnish evidence of the truth of our assertion that the poor little victim is a shocking illustration of the horrors of vaccination. In the case of one of the vaccinated spots, the flesh has gradually decomposed, leaving the arm-bone clearly visible, and producing a hole large enough to thrust the finger quite down to the bone. The sufferings which this poor little thing must have undergone are lamentable to think of, and should prove a warning to parents who, although disbelieving in the efficacy of vaccination, hesitate to run the risk of incurring a money penalty for default under the Vaccination Acts. The case under consideration is only one of a dozen which have come directly under our notice; and we should in this, as in others, have hesitated to make the facts public but for the manly conduct of Dr. Mills in certifying the *true* cause of death.—*Daylight*, Dec. 3, 1881.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 35.] FEBRUARY, 1882. [Price 1d.

NOTES OF THE MONTH.

Our progress is marked by the number of charges in defence of vaccination. As Dr. Johnson said, he knew when he was striking to purpose by the multiplicity of rebounds. One of the latest deliverances is a lecture, "Small-Pox and Vaccination," by Dr. D. Rutherford Haldane, President of the Edinburgh College of Physicians, in which he relates with unsuspecting faith the common series of inaccuracies that pass for the history of inoculation, along with the various fashionable fads as to the origin and suppression of zymotic disease, coupled, of course, with an exaggerated and incorrect reference to Pasteur's last revelation. He represents the medical profession as at first opposed to vaccination as prejudicial to their craft; the fact being that, led by the King and Court, the practice was accepted by acclamation, and that, with a few exceptions, the conversion of the profession was effected wholesale. The craze was universal, and apparently irresistible, being hastened, no doubt, by the desire to escape from the danger and horror of small-pox inoculation. Dr. Haldane deals with vaccination as if it were a single and simple affection, invariable as English gold coin, having not a word to say of Jenner's horse-grease; nor, like the President of the London College of Physicians, identifying small-pox inoculated on the cow with cow-pox. Let us hope that in the course of a few years such lectures will have become impossible, the ignorance and prejudice to which they are addressed having ceased to exist.

Dr. Alfred Carpenter has a clear head, and as concerns sanitary truth appears to have the root of the matter in him. For example, at Brighton he defined the origin and limits of zymotic disease in these words:—

"The class of disease called zymotic includes small-pox, fevers, cholera, diphtheria, *et id genus omne*. The places in which such diseases will be most fatal are pretty well known. The conditions producing fatality are of man's making, and can be removed by the action of man. What are those conditions? In a few words, they are due to those changes which result from the act of living. The natural products of secretion, or the excreta which are either retained too long within the body itself, or, being excreted, are not passed on to the vegetable kingdom for utilisation and re-application to man's wants—these excreta are the mainsprings of this class of disease, when allowed to remain where they ought not to be. It would be as impossible for zymotic diseases to exist among us as it is for fish to live long out of water, if all excreta were rapidly removed and immediately utilised. The presence of zymotic disease in our midst is evidence that some kind of excreta is retained somewhere in too close proximity to particular individuals."

Nothing could be more explicit. Dr. Carpenter here refers the existence of small-pox and its kindred to the tolerance of filth and stench; holding that apart from filth and stench it would be as impossible for them to exist as live fish out of water. He moreover adduced her Majesty's convict prisons as evidence of the truth of his contention, that it is possible to live securely exempt from zymotic disease. In those select and exclusive establishments, inhabited by men and women drawn from the most unhealthy and disreputable classes, the death-rate is no more than about 8 per 1,000; and this marvellously low mortality is ascribed by Dr. Carpenter to the observance of those sanitary conditions whereby small-pox and its kindred are made impossible.

Very good! To such doctrine we do not object. It is our own, and is taught by us continually and consistently. But Dr. Carpenter is not consistent. With all his common-sense and perspicacity, the vaccination superstition hangs about his mind, and leads him into absurdities that in the light of his better judgment might be thought impossible. Speaking at the Sanitary Institute, a few days before his appearance at Brighton, he thus delivered himself:—

"I think it may be taken as an established fact that the pauper class (excluding the casuals) are much better protected against the effects of small-pox than the class immediately above them, and who are more under the influence of those fanatics who object to vaccination, and who provide the funds by means of which their insane resistance is kept alive."

We answer that the pauper class dwelling in workhouses are almost as effectually secured from zymotic disease as the convict class in her Majesty's prisons. Their conditions are such that, to use Dr. Carpenter's comparison, the existence of small-pox among them is as impossible as live fish out of water. "Not so at all," says Dr. Carpenter. "They are protected from small-pox by their vaccination." Such is logic begotten of the cross between Science and Superstition—Sanitation and Vaccination! As for the other wing of Dr. Carpenter's assertion, that the class immediately above pauperism are withheld from vaccination by our teaching and influence, it is untrue, and, it is needless to add, Dr. Carpenter in his better mind knows it is untrue. The class designated is neither unvaccinated nor open to our arguments. But, as we have so often to observe, the Jennerian rite is regarded as so useful and so sacred, that whatever is contrived for its glory—even falsehood itself—is accounted praiseworthy. It would require a Pascal to do justice to the morality prevalent among vaccinationists.

Mr. Hasker is to be congratulated on having brought the question of repeated prosecutions for non-vaccination to a fresh issue. As an irreducible opponent of vaccination, who has been fined, and who treats the law with scorn, Mr. Ellison, the Lambeth magistrate, holds that he comes under the counsel tendered to the Evesham Guardians by the Local Government Board, and advises the Camberwell Guardians to consider the propriety of leaving him unprosecuted, or appealing to the Local Government Board for fresh instruction. The passage in the Evesham letter, dated Sept. 17, 1875, runs as follows:—

"It is important that parents should be well assured that proceedings in case of non-compliance with the law will not be lightly discontinued. On the other hand, the Board are prepared to admit, that when in a particular case repeated prosecutions have failed in their object, it becomes necessary to carefully consider the question whether the continuance of a fruitless contest with the parent may not have a tendency to produce mischievous results by exciting sympathy with the person prosecuted, and thus creating a more extended opposition to the law.

"The Board entertain no doubt that in all cases of the kind in question, the Guardians will not fail to exercise the discretionary powers confided to them in the manner best calculated to give effect to the policy of the law."

None can call this manly council. It is summed up in saying, "Try the metal of recalcitrants. They may yield; but if they don't, then leave them alone. There is no power in the law to effect their subjugation, and their open defiance and victory may do much to discredit vaccination." Under the circumstances, it is sound advice, the advice of Mr. Worldly Wiseman. On our side we have to admit that nothing has so contributed to the extension of our agitation as prosecutions for non-vaccination, and especially repeated and vindictive prosecutions; and when we are asked how best to assail and destroy the Jennerian superstition, our invariable advice is, Refuse to have your children vaccinated, proclaim your resistance, and accept the penalty. Lecturing is good, and the circulation of literature is good, but nothing can compare with defiance of Guardians, and open witness-bearing to the light of science and the right of conscience in the presence of magistrates. The infamous law will only be broken down by wide-spread and persistent resistance.

Another point in Mr. Hasker's case cannot be passed without notice. When, flushed with victory at the polls, the Liberals took office, they undertook to amend the law by enacting that a single fine should be the penalty for each offence. Forthwith the representatives of the medical profession went into convulsions, and appalled Mr. Dodson with their outcries. "If these dreadful anti-vaccinators," it was said, "are let off with a fine, there will be no limit to their mischief. They will persuade multitudes to withhold their children from vaccination, and small-pox will decimate the country." The result was that the Government took fright, and dropped the project. We, and others behind the scenes, knew that the shrieks of Ernest Hart and Co. were superfluous, and simulated for business purposes. What the Government proposed was to make regular what is the widely-irregular practice. The Camberwell Inspector who prosecuted Mr. Hasker assured the magistrate "that it was not the practice of the Camberwell Guardians to summon more than once for the same unvaccinated child, and that when there had been a conviction under the 29th Section of the Act, the Guardians then let the matter rest"; adding that "the Local Government Board do not wish the Guardians of any Union to repeat prosecutions after a first conviction." What is the rule in Camberwell is the rule in the vast majority of parishes. Nay, more! in many instances, when a parishioner is known to be well off, and firmly opposed to vaccination, he is not prosecuted even once, but is judiciously let alone. What we complain of is that the like rule does not everywhere prevail. In some parishes poor folk who distrust and detest vaccination are prosecuted over and over again, and not unfrequently with spite

and malice; parsons and other Jacks-in-office converting their praiseworthy resistance to the prevalent superstition into matter of personal offence. We have no favour for limited persecution. We utterly object to pay fines for the right to refrain from wrong; but were we of a different mind, we should maintain that in the interest of vaccination itself, it was expedient to hold an even balance; that it was the duty of Government to make punishment everywhere equal; and to withdraw prosecutions from the discretion of Guardians who too often use the law to gratify their rancour and avenge their trumpery dignity.

Mr. Thomas Strain, of Belfast, has, like Mr. Hasker, succeeded in extending the interpretation of the law. Prosecuted repeatedly for the non-vaccination of his child, the baffled Guardians appealed to the Irish Local Government Board for advice. The Board, lacking the discretion exhibited in the Evesham letter, replied that it was their duty to prosecute Mr. Strain until he submitted; and the Guardians, exultant over the license to persecute, instructed their solicitor to "go at" Mr. Strain as often as possible—weekly, if it could be managed. How these Irish love a shindy in any cause, just or unjust! However, the combat was unexpectedly cut short. The case came before Mr. McClelland on Dec. 23, when Mr. Harper contended, on the part of Mr. Strain, that under the Petty Sessions Act (Ireland) 1851, mentioned at the head of the summons, it was necessary that action for any offence under said Act be taken within six months from the time when the cause of complaint shall have arisen; and as in Mr. Strain's case the statutory term of six months had long expired, no action against him could lie. Mr. McClelland, from the bench, held that Mr. Harper's objection was valid. He had looked at the Vaccination Amendment Act (Ireland) 1879, and found "that proceedings on account of neglect to have a child vaccinated may be taken during the continuance of the neglect"; but there had been no direct proof before the Court of the continuance of the neglect; but even if proof had been adduced, he considered that the Acts of 1851 and 1879 should be interpreted conjointly; and as Mr. Strain objected on conscientious grounds to have his child vaccinated, he was entitled to get any benefit conferred by the joint exposition of the Acts. He therefore dismissed the case, with 12s. 6d. costs. The Guardians, thus cruelly checkmated, have resorted afresh to the Local Government Board, saying that Mr. McClelland's decision "will entirely frustrate future prosecutions of defaulters under the Compulsory Vaccination Act all over Ireland, and that the Board should take immediate steps to have the legality of Mr. McClelland's decision tested, as other magistrates throughout Ireland would be told that they are not to sit as a Court of Appeal upon said decision." In the meanwhile, the Guardians having done their duty, and having paid the 12s. 6d. costs under threat of distraint, Mr. Strain is relieved from further molestation.

The frequent advice to submit to vaccination under protest, though scarcely to be accounted serious, is answered by a reference to such cases as those of Mr. Hasker and Mr. Strain. They have put the law to the test with conspicuous advantage. Reforms are achieved by agitation and resistance, and without the means we should wait indefinitely for the end. Statesmen have no ears for anything but loud cries, and pay no heed to opposition that is limited to logic. Moreover, active resistance compels public attention. Mr. Strain's case has been widely discussed in the Irish newspapers, and has afforded many opportunities for the exposure of the fallacies on which the practice of vaccination rests. Mr. Strain himself has proved in the press that his resistance is in nowise fantastical, but justified by science and good sense. A letter by Mr. Kennard, in the *Northern Whig* of Jan. 17, is one of those pieces of demonstration which, where they do not produce conviction, produce disquiet and scepticism that will not easily be allayed. Distrust in vaccination is spreading widely, and distrust in due season ripens into active disbelief. The *Northern Whig* argues that if Mr. Strain and his child were only concerned, he might receive indulgence; but, "by neglecting to have the child vaccinated, he may be the cause of spreading small-pox to other people, who have not his prejudices against vaccination." How? If other people are vaccinated, and if vaccination protects from small-pox, how can small-pox spread to them? If it were believed that vaccination really prevented small-pox, its neglect by unbelievers would be treated with indifference. They would be left to the appropriate consequences of their folly. Instead, although possessed of a prophylactic so miraculous, small-pox was never held in such mortal terror as by those who profess unbounded trust in the infallible charm. The verbal confidence and the actual fear are by no means singular in human experience. The assiduity with which men try to believe that they believe (when they do not) is as remarkable as it is touching, although in other aspects contemptible.

Mr. W. E. Briggs sits in the House of Commons as Liberal member for Blackburn, and is evidently a simple sort of person. Mr. Thomas Duxbury having written to inquire whether he would support Mr. Taylor's motion for the repeal of the penal clause of the Vaccination Act, Mr. Briggs, in his reply, advanced the following propositions:—

I. "We must rely upon the advice of the great majority of medical men, whom we trust with our lives, and look to them to restore us to health.

II. "No Act of Parliament of this character is passed without very careful deliberation, and upon the clearest and most weighty evidence procurable."

His faith in M.D.'s is thus of a piece with his faith in M.P.'s. Doctors are to be trusted, and Parliament is to be trusted.

III.—"When an Act is passed, it becomes law, and it is our duty as good citizens to obey it, however unjust we believe it to be."

Strange doctrine this! We have been taught at church and elsewhere, that a man's first duty is to refuse to do what he knows to be wrong, whatever the command of kings and parliaments; and we have always considered that a good citizen can perform no higher service toward his fellows than by witnessing to what is right in persistent disobedience to unjust law.

IV.—"The law has in view, not vindictive prosecution of an offender against the Act, but the ensuring that the Act shall be carried out."

Mr. Briggs describes the Act by inversion. It does not enforce performance, and is vindictive in its impotence.

V.—"If one fine would free a man from compliance with the Act, a rich man, however heavy the sum in which he was mulcted, would be able to free himself for ever from the action of the law, leaving his child a centre from which small-pox would most probably spread."

Here again Mr. Briggs is conspicuously at fault. What he fancies does not happen is precisely what does happen. An anti-vaccinator of moderate means can meet the heaviest penalties with indifference; and the knowledge that he can and will defy the law, generally secures him from prosecution. On the other hand, the fact that a poor parent cannot meet a repetition of fines, tempts cowardly guardians to set the law in force against him. In short, the administration of the Vaccination Act is characterised by the wildest irregularity, and is discreditable in the extreme to the Parliament that passed it. Mr. Briggs ends with saying:—

"No doubt the subject will be thoroughly discussed once more, and the evidence on both sides carefully sifted, and I can promise you that I will carefully and attentively listen to the arguments for and against. Until then I must reserve my opinion."

Reserve his opinion, indeed! When Mr. Briggs can write of an unvaccinated child as "a centre from which small-pox would most probably spread," it may be asked what he reserves, or what folly is left for him to commit!

The committee of the London Society for the Abolition of Compulsory Vaccination, possessed with the courage of their convictions, invited Dr. Drysdale to lay before the members what he considered the defence of Animal Vaccination; and in pursuance of the same policy they have invited Dr. W. B. Carpenter to give them a lecture. Dr. Carpenter has kindly consented, and in Steinway Hall, 15, Lower Seymour-street, Portman-square, on Friday evening, 3rd February, at 7.30 o'clock, he will read a paper entitled, "The increase of Small-pox Mortality in London, during the year 1880, without any corresponding increase in other parts of the Kingdom, a reason—not for a repeal of the Compulsory Vaccination Act—but for increasing the efficiency of its operation." Dr. Andrew Clark will occupy the chair, and a discussion by medical men will follow. The occasion can scarcely fail to be a most interesting one, and it is unnecessary to solicit a good attendance.

PILLS AGAINST PANIC.

Outbreaks of small-pox in the United States and Australia have given rise to great excitement and occasional panic. It is plain from the reports in the newspapers that the dangers of the disease are wildly exaggerated, and especially its power of diffusion and infection. Here in London, where small-pox is endemic, we preserve a calmer mind, spite of recurrent attempts to create alarm, and to drive the inhabitants, young and old, into the vaccinators' shops. Small-pox is a matter of locality; its haunts are slums where dirty folk abide and foul smells prevail; whilst those who dwell in better quarters have little or nothing to fear. The sufferers from small-pox among the lower orders are collected in large hospitals, which some describe as dangerous to the neighbourhood, and others as harmless to those even in immediate proximity, if only their sanitary conditions be good. Those who are most afraid of small-pox are those whose acquaintance with it is limited to hearsay, and whose terror is played upon by those who have vaccine virus to sell. It may be vain for us to try to inspire a rational temper into those who like to be terrified (a numerous body);

but they can scarcely disregard the authority of a faithful vaccinationist like Dr. Henry D. Littlejohn, of Edinburgh, Medical Officer to the Scottish Board of Health. In the Annual Report for Scotland, 1879-80, he thus delivers himself of advice, the fruit of twenty-five years of active sanitary service. Mark his words:—

"All medical authorities are agreed that the risk attending the entering a room in which there are cases of infectious disease is infinitesimally small to the healthy individual; and that even where a person actually assists in removing a patient sick of an infectious disorder to another apartment or to a conveyance, while the risk is greater, it is in reality very small to the sound constitution.

"As a rule, it is rare to find nurses affected who live for hours and days at a time in the same atmosphere with the sick, and who at the same time make use of the simplest precautions. It is still rarer to hear of medical men sickening of infectious diseases caught in their practice, and it is well known that medical men never, or very rarely, bring the infection of such diseases to their households.

"For twenty-five years I have been engaged in active sanitary work, and have had, with very limited staff, to cope with serious outbreaks of Cholera, Small-pox, Fever, Scarlatina, Measles, and Hooping-cough, and although I have during that period brought up a large family, I have neve communicated any of these diseases to my children or dependents, nor am I aware that any of the numerous sanitary inspectors who have acted under me have ever contracted or communicated these diseases while in the public service.

"To live in the constant dread of infection is one of the surest methods of courting the risk of an attack. It is a popular, and I believe a true, saying with regard to Cholera, that the fear of it kills more than the scourge itself. This holds equally good of other forms of infection; and the Sanitary Inspector, to be an efficient public servant, must be assured of this cardinal fact, that infectious germs of all kinds have no power of successfully attacking the healthy individual."

Let panic-stricken Americans and Australians peruse these observations and take courage. They are addressed by Dr. Littlejohn to sanitary inspectors whose lives are spent in contact with zymotic disease; he telling them that the risk of receiving and diffusing infection is to be lightly regarded, and that their defence is to be found in the maintenance of physical vigour and a courageous spirit. Wherefore, it may be argued, if doctors, nurses, and sanitary inspectors in contact with fevers have so little to fear, why should those whose contact with them is occasional (if occasional) be filled with alarm when it is reported that some cases of small-pox have occurred in a party of immigrants, or in some low lodging-houses, or here and there in a large city? And it may further be reflected how remarkable it is that the medical men who stimulate and justify the abject terror concerning small-pox exhibit so little fear of the disease themselves, as if the sellers and buyers of vaccine were of different flesh and blood.

Whilst Americans and Australians in comfortable circumstances have little reason for concern about small-pox personally, they need not distress themselves as to its influence on the common mortality. To read their newspapers, it might be supposed that every man, woman, and child killed by small-pox is as a person shot or strangled, who but for small-pox would have remained alive. Our European experience proves that such a mode of reckoning is entirely illusory. Small-pox does not raise the death-rate; on the contrary, even severe variolous epidemics are signalised by a low general death-rate. In other words, small-pox is not a cause of extra deaths, but a substitute of other forms of death. It displaces kindred fevers, and when it disappears, they return and maintain, and even augment, the average mortality. Small-pox is usually described as a loathsome disease, which, indeed, is its worst offence; but its loathsomeness may be reduced to indifference by rational treatment, and need never be magnified into an intolerable affliction. For the benefit of vaccination, sma ll-pox has been converted into a bogey of the first magnitude, and so effectually that it is scarcely possible for some people to command their nerves sufficiently to discuss its phenomena intelligently. It is actually asserted, and apparently believed, that if an outbreak of small-pox is not checked somehow, it may spread over an entire community and sweep off its members like plague in the middle ages. It is not for us to define possibilities, but we shall look in vain for any evidence of such terrific insurgence of small-pox. It has never been witnessed in European cities. In London last century, when the disease had numerous facilities for prevalence, and was cultivated by inoculation, the deaths never exceeded 4,000 in any year among a million of inhabitants. It may be ignorance that conjures up these possibilities of death and desolation from small-pox, but in presence of facts so well authenticated, it looks like imposture. Assuredly, if vaccination had not to be cracked up, the truth would be forthcoming.

Do we, therefore, think lightly of small-pox? By no means. We take it, with its kindred fevers, for an index to foul conditions of life, and a call to substitute wholesome conditions. When the Edinburgh pietists prayed Lord Palmerston to command a fast to avert cholera, he advised them to try cleanliness. In like manner, when it

is recommended to resort to vaccination to "avert small-pox," we say: No; let us rather attack the causes of small-pox. When it was believed possible, by magical arts, to induce and remove sickness, a rite like vaccination might have been accounted a credible means of salvation; but at this day it is a preposterous anachronism. We know the conditions on which small-pox exists, and we know, as Dr. A. Carpenter tells us, that, apart from such conditions, its existence is as impossible as live fish out of water. Moreover, we have to recollect for our great encouragement, that if we cut off the sources of small-pox we not only get rid of small-pox but of the forms of zymotic disease with which it is correlated and convertible. Sanitary science reveals a common disorder with a common origin under the category of fever, and thus it is that the suppression of any member of the group *in its source* leads to the suppression of all. Thus, too, the singular and superficial anticipation of one form of fever by vaccination is condemned as absurd; for, if even it threw back the disease (the cause remaining untouched) it would be to re-issue in some other and aggravated type.

Another consideration we may submit to our terrified kinsmen in the West and South—small-pox at its worst is never a universal affliction. Its attack is limited to a small portion of any population, chiefly its dregs. Let us set the percentage liable to attack at the high figure of ten, and then ask, Why should nine-tenths undergo the troublesome and hazardous sickness of vaccination lest among them should be included some of the assailable tenth? Is the chance of small-pox (supposing vaccination could avert it) worth the universal discomfort and danger of vaccination? The answer is inevitable—Certainly not. Again, be it remarked, small-pox is especially an affection of the young. In 1837-38 there was a severe epidemic in England, when 9,762 perished, and the victims were thus classified according to ages:—

Under 5 years	7,340
Between 5 and 15	1,668
„ 15 „ 30	528
„ 30 „ 70	210
Upwards of 70	16
Total	9,762

The like phenomenon has characterised every European epidemic. Children are the chief sufferers, and these the offspring of the poor and wretched. We have, therefore, to observe that the incidence of small-pox is to a great extent limited, first, to the miserable among any given population, and, second, to the young bred in that misery. Wherefore, we say, why should people who lead wholesome lives distress themselves over a risk so trifling as small-pox? and, still more, why should the same people, past the small-pox age, allow themselves to be driven like donkeys to be re-vaccinated? Look at the practice as we will, vaccination and re-vaccination bear all the notes of quackery, be it conscious or unconscious.

SMALL-POX NOTES OF THE YEAR 1881 IN ENGLAND.

(Read at the Cologne Congress.)

In England, the year 1881 will be memorable in the annals of small-pox, but mainly with regard to that arch-imposture, re-vaccination.

Small-pox is always present in London. Seldom can the weekly return of the Registrar-General record no sporadic cases of this malady, scattered over the 144 square miles on which stands the metropolis.

That this is so, is shown by the constant habit of the return, which states the proportion during the current week, above or under the average small-pox deaths, during the last ten years, in the corresponding week.

Apparently there seems to be a slight increase about every third year; and about once in a decade—generally, if not universally, in a healthy season—the disease becomes more or less epidemic in its character.

Nevertheless it may be observed, by the diligent examiner, that such deaths almost invariably occur in the low, dirty localities. Those who die are, in fact, the weak, who would have been carried off by any other prevalent disease; and, during an unhealthy season, in far larger numbers.

Towards the end of 1880, the usual sporadic cases of small-pox began to rise somewhat—to from 10 to 20 weekly; and in one week 33 deaths were registered. It was not until the week ending Jan. 29, 1881, however, that the number reached so many as 50. Now, the population of London, at the census just taken, was 3,814,571. If we divide this by the number of weeks in the year, we find that 50 deaths out of 71,434 gives a yearly death-rate of 700 per million; or, to make this proportion clear (so easily is panic raised among those unaccustomed to deal with figures on a large scale), if one person out of every hundred living were divided into a hundred parts, seven of such parts only would have been carried off by the dreaded enemy. It was not until June 23 that the weekly small-pox deaths recorded again fell to below 50. During the twenty-six weeks 1,698 small-pox deaths were registered, the proportion being 890 per million annual rate, or eight one-hundredths of a person per cent. of the whole London population, made up of scores of clean localities like Cheltenham, Buxton, Leamington, and Bath,* on the one hand; average towns between; and scores of dirty spots like Grimsby,† on the other. Yet, as before stated, almost the entire number of these deaths occurred in the dirty Grimsby quarters.

* Healthy watering-places in which there was no small-pox, or a few sporadic cases only, during the great 1871-2 epidemic.

† A dirty river port which suffered the highest small-pox mortality in England in that epidemic.

It is, of course, assumed to be the official duty of the Medical Department to warn the people against dangerous plagues of all kinds, no matter how unusually healthy the season may happen to be. Thus, although 60 per cent. of the small-pox deaths, in this six months, occurred during the three months of April, May, and June, during that quarter "the annual death-rate did not exceed 18·6 per thousand—the lowest recorded in the second quarter of any year in England and Wales since the establishment of civil registration in 1837."* And in the previous quarter "so low a death-rate (21·8) in the first quarter of the year has not been recorded since 1856."†

The principle of Dr. Lettsom, which these official gentlemen seem to have adopted, is that the deaths from small-pox in London, multiplied by the difference in population, will furnish the small-pox deaths throughout the Kingdom, *e.g.*, in London, six months, 1869, "or" (Lettsom) 15,000 in England and Wales; the actual number, exclusive of London, being only 308. Following this method, the department urges the dwellers in Belgravia, court precincts, palatial squares, and leafy suburbs; Bath, Cheltenham, Leamington, and Buxton, one and all, to arm themselves against the wolf springing forth (though unable to surmount the filthy barriers) in Shoreditch and Bethnal Green, Hackney and Whitechapel.‡

The following are a few examples of the panic which has thus been officially created, as the natural consequence of alarming placards posted all over the Kingdom, by the Guardians of the several Poor Law Unions, under the direct authority of the Local Government Board, inspired by the medical officers of the department.

All persons have been urged to get themselves, their children, and their dependants, re-vaccinated, in view of the terrible scourge with which they are said to be threatened; simply because less than one in a thousand dwellers in the Metropolis alone have died of small-pox instead of some other malady,

Near a small town, 30 miles from London, six deaths in all have occurred from small-pox, all vaccinated, and two of them re-vaccinated. 1. An infant four or five months old was vaccinated, and within a few days it was attacked by small-pox and died.§ Its mother (vaccinated) was sent prematurely to hospital, and subsequently only had small-pox, but recovered after severe illness. The father was re-vaccinated from the infant, and got small-pox ten days afterwards, but recovered. 2. A young man about 20 arrived May 27 at a dirty locality, unwell, but the doctor did not know what was the matter with him. On June 3 he was pronounced to have small-pox, of which, twelve days after, he died. 3. A boy of 16 coming to the house, June 4, was re-vaccinated the 6th, and was attacked and died within a fortnight. 4. Fourteen days after his death his landlady (vaccinated) was attacked (recovered); and a few days following her son (vaccinated) was attacked Monday, and died Saturday. 5. A brother of patient No. 2, living on the same spot, vaccinated and re-vaccinated, was attacked a fortnight after the death of his brother, and died in a week. 6. And one more death (vaccinated) occurred in the same locality. Here the evidence goes to prove that the cases originated either directly from vaccination or from local causes—probably a combination of the two — a new comer, previously out of health, being the first to succumb (in the set of 5), as is usually the case with the unacclimated. In the several parishes of the district, 57 cases, and 13 deaths in all, occurred in a population of 20,015, or 6½ hundredths per cent.; yet hundreds have been rushing to be re-vaccinated. A young lady resident about eight miles from the place, re-vaccinated with the rest of the family, died within twenty-four hours after the pure lymph had been inserted—a parallel case to that vouched by Dr. Skinner, in 1871, at Liverpool, where a "blooming girl of 15" succumbed a fortnight after re-vaccination.

At Cheltenham a lady of 40 was, during the recent panic, induced by her nerves to be re-vaccinated. She died within a few weeks. There has been but one single death (and that several months previously) from small-pox in the county of Gloucester, at a place many miles distant from Cheltenham.

An eminent man recently died in London of erysipelas, produced by blood poisoning, but as to what caused the poisoning, the authorities professed themselves ignorant. No scientific physiologist will hesitate to affirm that poison received into the blood may lie latent, as it were, for an indefinite period, and its fatal results may be exhibited even after the lapse of years. Thus, although Sir Culling Eardley, in 1863, died of pyæmia a fortnight only after re-vaccination, the fact that a much longer period (if such was the case) elapsed before the subject in the instance before us fell a victim to similar violence, does not diminish the probability that to re-vaccination, either directly or in a highly contributory degree, can this untoward death, at 66, of a man of singularly spare and temperate habit, be truly ascribed. Especially when it is well known that his most intimate personal friends are ardent advisers of repeated vaccination whenever small-pox happens to be prevalent.

I was intensely pained to find that a beautiful girl of my acquaintance, whose parents had every means of informing themselves of the fearful risk, had been lately submitted to this insane operation. My horror was not lessened by the circumstance that, just previously, the recent Algerian catastrophe had been brought to my notice, where out of fifty-eight soldiers, re-vaccinated from one infant, several died, and not one escaped the communication of the most horrible of diseases! Every survivor of them ruined for life, and worse than murdered. But such is the infatuation of panic stricken humanity, which will sacrifice life, truth, liberty, everything, to dastard fear.

One other case I will mention. In the West of

* Quarterly Report of the Registrar-General, No. 130, p. iv.
† Report, No. 129.
‡ London districts abounding in 'slums." During July, August, and September, out of 461 small-pox deaths, 391 occurred in six only of the 29 larger districts into which London is divided.
§ The London return, July 23, records the death from small-pox of an infant two weeks old, that had been vaccinated *at birth*, because the mother was then suffering from small-pox: and return Sept. 17, one aged 17 days, from variola seven days, vaccinated *successfully* fourth day!

England an old gentleman of 90, for fifty years a teacher of religion from the same pulpit, lately going from home to a neighbouring part of the country, got himself re-vaccinated, lest he should run the risk of premature death from small-pox on his way; and yet, during the London epidemical six months, not a single case had been registered in the county in which he resides, or in that which he was about to visit!

London, Sept., 1881. THOMAS BAKER.

A PROBLEM IN VACCINATION EVIDENCE.

IN a paper recently read at Owens College, Manchester, by Dr. Henry Tomkins, Medical Superintendent of the Fever Hospital at Monsall, certain statements were made which seemed well worthy the attention of inquirers into the vaccination question. Dr. Tomkins stated that while he had charge of the Monsall Fever Hospital, more than a thousand cases of small-pox passed under his care, yet no servant, nurse, porter, or other person engaged there had, after re-vaccination, taken the disease. A laundress who had escaped re-vaccination died of small-pox; a nurse who, having had small-pox some years before, was considered protected, nevertheless took the disease mildly; an unvaccinated painter, who worked on the premises, had a rather severe attack; and a servant, who had by an oversight been allowed to work three days before being vaccinated, had a trifling attack before the vaccination ran its course. Again, all the students attending the hospital for the past two years had been vaccinated before entering the small-pox wards, and none had taken the disease. Dr. Tomkins defied any one to produce even half-a-dozen unprotected persons, and expose them as these students had been exposed, without some of the number catching the infection. Facts such as these he thought should cure the most ardent anti-vaccinator of his folly.

Being desirous of sifting Dr. Tomkins's evidence, I wrote to him with a number of questions, to which he courteously returned prompt answers. These I shall present, in analysing his evidence as a whole.

I desire first to direct attention to difficulties in the testimony already quoted.

1. In the case of two women who took small-pox, it is explained that one had "escaped" re-vaccination, and the other had, "by an oversight," been allowed to go to work before being vaccinated. I make no charge whatever against Dr. Tomkins's good faith when I say that these cases, which he seems to regard as veritable exceptions proving the rule, cast doubt on the value of his evidence. It is impossible to feel sure that none of the other nurses who have escaped small-pox have not likewise escaped vaccination. The supervision has obviously not been rigorous.

2. The case of the nurse who took small-pox a second time must be a puzzle to Dr. Tomkins himself, for he tells me that, though he considers vaccination as good a protection as the disease itself against subsequent attacks, he does not think it a better. If we are to accept his evidence, we must believe it *is* better. Does he not then, on his own showing, prove too much?

In order that the full strength of Dr. Tomkins's position may be shown, I should mention that he tells me none of the present staff of nurses have had small-pox; and that he can only find that one of the nurses employed during the past three years had ever had an attack.

Now for the immunity of the students. Several of these gentlemen have had scarlet fever, but none typhus. Dr. Tomkins informs me that the nurses and the hospital staff have not been equally fortunate. Five nurses have died during the last two years of typhus, and he himself has had a severe attack. He also states that half-a-dozen medical acquaintances have caught the disease from patients. (This by way of refuting the proposition that doctors escape small-pox through being inured to the infection.) He accounts for the students escaping typhus by their custom of standing at a safe distance from the patients, which the nurses cannot do. How closely the students approach small-pox patients I have no means of knowing.

So far, then, the evidence goes to show, if we overlook two awkward difficulties, that nurses, at least, are protected against small-pox by vaccination, and not through being inured to the infection, as they readily succumb to typhus.

The inquiry must now take another direction. I learn from Dr. Tomkins that during the past three years the number of cases of the more common infectious diseases treated in the hospital have been as follows:—

Measles	27
Typhoid fever	188
Typhus do.	131
Scarlet do.	364
Erysipelas	300
Small-pox	1,005

It is instantly obvious that these figures do not lend themselves to the theory Dr. Tomkins supports. They, in fact, absolutely nullify the former evidence. We find that whereas among the outside public small-pox proves more infectious than typhus in the proportion of nearly eight cases to one, these proportions are entirely reversed among the attendants in the hospital.

It will be observed that on the inurement theory, the nurses in Monsall Hospital are more likely to be safe from small-pox than from typhus, seeing that the more frequent the contact the more complete would be the protection. I am not here concerned, however, to support that theory, neither will I lay any stress on the argument against vaccination furnished by Dr. Tomkins's figures on the surface.

The central problem before us is, Why does typhus, which is, comparatively speaking, so slightly infectious outside the hospital, become so contagious inside, while small-pox, which, among an extensively "protected" population, is far more catching than typhus, affects the nurses so little in comparison? This question, it seems to me, is one for the hospital authorities to answer. I have, I think, raised it fairly, being sincerely desirous of getting at the truth. I submit that, so far as the facts before us go, Dr. Tomkins has not so much demonstrated the virtues of vacci-

nation as the dangers of his hospital. Of that institution I know nothing personally, but I confess I should be reluctant to be treated for typhus in it if I could find no satisfactory solution of the problem above stated. If the hospital authorities cannot explain, the matter might profitably be investigated by medical men.

J. ROBERTSON.

DR. HUSBAND ON ANIMAL VACCINATION.

IN the 35th annual report of the Scottish Board of Health, there is a Memorandum by Dr. Husband, Superintendent of the Scottish Vaccine Institution, on Animal Vaccination, in which he argues against any change in the existing practice as unnecessary, and undesired by the people of Scotland. As to the asserted immunity of "pure lymph from the calf" from the risk of propagating other diseases along with vaccination, Dr. Husband observes:—

"It should be borne in mind that it cannot be shown that there is *no* risk of transmitting diseases from the calf to the infant. The very fact that vaccinia itself is so readily communicated is a presumption that danger of this kind does exist—not probably greater than that of communicating disease from infant to infant, but, for anything we know, not less."

The Calf Lymphers, led by Dr. Cameron, M.P., meet with little encouragement in Scotland. Their true answer is, that the cow-pox they recommend was *known* to be impotent against small-pox by Jenner; and, unless they claim to have made a new discovery, and that Jenner was mistaken, they are operating under false pretences. It is of great importance to hold this position firmly and to prevent it being obscured.

MR. HERBERT BURROWS.

IN a letter addressed to Mr. George Bone, dated Oct. 22, 1881, Mr. Burrows observes:—

I am not an anti-vaccinator, but I am opposed to vaccination. By that paradox I mean that I oppose vaccination on one broad ground, that it is a sin against humanity to introduce extraneous disease into the human body. To me this is not a question of statistics. (1) I do not pretend to have made a study of this special question, but for many years I have had to make a special study of all kinds of statistics, and my deliberate opinion is this, that they can be so handled by men of adverse views as to prove absolutely contrary things. On one point, so far as I can see, facts are against you. I mean as to the general evil effects of vaccination. I suppose that a large portion of the children and people I meet are vaccinated, but I do *not* see the evidence of the ill effects. (2) My three children were vaccinated (I was not opposed to vaccination then), and have certainly suffered nothing; neither have I. But this is beside my point. If there were not *one* case of after evil effects, my position is the same—health should be secured by good food, pure water, pure air, an abstemious life, and the best possible sanitary conditions; and anything which (as, in my opinion, vaccination does) tends to distract public attention from these is harmful. (3) I know, of course, that there are many cases of after evil effects from vaccination; and I can give you a very striking one. When I was at Cambridge University, a very clever friend of mine was reading for the Mathematical Tripos. Some years before he had been vaccinated, and had skin disease ever after, and close study made the disease fly to his eyes. In consequence, he was unable to read for a great part of the time; he lost ground in his studies, took a considerably lower place in the examination than he would otherwise have done, and was handicapped for life. Doctors, I know, tell us that such mishaps could be avoided. Perhaps they could; but here, again, my position is, I believe, impregnable.

This rage for inoculation—to use a general term, is becoming almost ludicrous. You know, of course, that in Norway and Sweden inoculation for syphilis is practised. Pasteur's late experiments have made this sort of thing the fashion, and I see that now it is proposed to inoculate vines so as to protect them from the ravages of the phylloxera.

REMARKS ON FOREGOING OBSERVATIONS.

1. The objection of Mr. Burrows to statistics is an objection that applies to all matters of fact; but while facts may be so handled by men of adverse views as to prove absolutely contrary things, yet outsiders with perspicacious and judicial minds may be trusted to distinguish truth from sophistry. Particular evidence for and against vaccination may be adduced to endless extent; but when we have masses of evidence impartially collected and classified in the form of statistics, we have material for argument and conviction which cannot be dispensed with. 2. As to the general evil effects of vaccination, how can they be eliminated and specified? Dr. Richardson says he has never seen a healthy child, and no adults enjoy perfect health; and how much of the deduction from the standard of perfection may not be attributed to vaccination? Who can say? We are content to affirm that if vaccination produces that constitutional disturbance which its advocates assert is requisite to ensure immunity from small-pox, it necessarily stands for an injury to health, and an assault upon vitality. The mischief may not be obvious, and may be surmounted in the more vigorous, but it is none the less certain, and, in numerous instances, is alike certain and obvious. 3. Mr. Burrows' chief objection to vaccination is that it distracts attention from those sanitary measures which really make for the public health, and save not only from small-pox, but from kindred forms of zymotic disease. Therein he is supported by Mr. Edwin Chadwick, who points out that such has become the rage for vaccination, that in the medical department of the Local Government Board it is the chief thing thought of, and if only the death-rate from small-pox happens to be low, there is little concern displayed as to other modes of mortality. To reduce the general death-rate of a town represents thought, contrivance, and battle; but any set of boobies are equal to the job of vaccination; and although it does not keep away small-pox, it is always possible to say the outbreak would have been much worse save for their supreme exer-

tions, and that the attacks would have been infinitely more virulent and fatal save for their liberal exhibition of the Jennerian sacrament.

SOLVITUR AMBULANDO.—KEIGHLEY.

I HAVE gone through the books to find the amount of money paid by our Union for vaccination in 1871 and 1881. The first year for which the percentage of vaccination in Keighley is given in the returns of the Local Government Board is 1872, when 78·04 of the births were reported as "successfully vaccinated," whilst London stood at 82·20, and England and Wales at 80·41. Last year our vaccination officer had to report that in Keighley township only 9 per cent. of the children born were vaccinated. The saving to the Union in the matter of money by the decrease of public vaccination is thus represented:—

	£	s.	d.
1871	154	6	10
1881	42	16	0
Cost saved	111	10	10

No account is here taken of the fees saved from private practice, which must at least represent an equal sum.

We have to-day been arranging for the purchase of a farm of 24 acres. The payments, with interest, are to extend over thirty years, and will be met almost exactly by what we save from public vaccination.

No one would grudge the expenditure of £100 a year for the reduction of disease and mortality, and some may think that what we gain in cash we shall lose in small-pox. So far nothing has occurred to warrant such a surmise. On the contrary; in the six years prior to 1875 there were 188 deaths from small-pox in the town of Keighley; whilst in the six years subsequent to 1875 there has not been a single death from small-pox—not one! Between 1870 and 1880 the Registrar-General's returns show that 60,038 persons died in this country of small-pox, being the heaviest variolous death-rate of any decade in the present century, representing on an average one death per annum from the disease in every 6,600 persons. For the assumed prophylaxy of vaccination, Mr. Ernest Hart estimates the medical profession receives privately £130,000 yearly, and from the returns, imperial and local, an equal amount appears to be expended on public vaccination. Thus not less than £250,000 a year is expended in securing the people from small-pox; and yet are they not secured!

Keighley, *Jan.* 18, 1882. R. A. MILNER.

MR. JAMES MITCHELL, of Notting-hill, being summoned before Mr. Partridge at Hammersmith for the non-vaccination of his child, was told by Mr. Partridge that as he conscientiously objected to the operation, he should only fine him 5s. and costs. This is an improvement on metropolitan practice. When Mr. Tebb used to appear at Marylebone, the magistrates, after expressing their sense of respect for his convictions, always ended in imposing the extreme penalty, professing, most untruly, that they were left without discretion.

WHY DO YOU OBJECT TO VACCINATION?

BY WILLIAM HITCHMAN, M.D., M.R.C.S., &c.

HUNDREDS upon hundreds of times has this question been put to me in the course of the last twenty years, during which I have ceased to *poison the people*, or taint the blood of their children with an ineradicable malady, whether called scrofula, syphilis, or bovine tubercle. Vaccine virus, not "pure lymph," conveys a disease to-day by a compulsory statute of Queen, Lords, and Commons, that is loathsome, morally, socially, and physically, in the nature and extent of its health-destroying agency, as now witnessed in the loss of vigour and strength in so large a proportion of the inhabitants of Liverpool and Lancashire generally. Vaccination is precisely one of those particular subjects which it is the solemn duty of every man and woman to examine justly for themselves. It is indeed a saddening spectacle, if not an appalling feature of the literature of pro-vaccinators, that in proportion as scientific knowledge of life, health, and disease in nations and individuals is more extensive, true, and exact, the more deep become the bigotry of official despots, and their coadjutors of the dominant medical press—everywhere seeking, as they are, to uphold the odious doctrine that compulsory vaccination, or State blood-poisoning, must for ever continue an inseparable accompaniment of human progress, or advancing civilisation, as well as a fixed article of faith in the stereotyped creeds of the Faculty of Medicine, at home and abroad. I object to vaccination by force, or fine and imprisonment, because it is an intolerable aggression upon the righteous liberty of every intelligent person in this country, or out of it, to invade the sanctity of home and parents, and compel them to offer their children as a sacrifice on the altar of Quacks and Quackery, whose alleged preventive of small-pox, whether derived from horse-grease, cow-disease, or human corruption, the most corrupt of all, not only does not prevent its recurrent outbreak throughout the world, but has, besides, the power to disfigure or destroy its victims from generation to generation. Vaccination, if worthy of respect, would need no compulsion for its acceptance, but, worse still, its own cooked statistics prove it to be an imposture, cheat, and pretence, within the pale only of the charlatan, the empiric, and the mountebank. What is the state of the public health in Liverpool and Lancashire in January, 1882? I affirm that now, as for thirty years past, within my own personal experience and observation, vaccination has proved itself a curse rather than a blessing, causing, primarily or secondarily, more deaths than any other disease of childhood. Rickets, scrofulosis, and tuberculosis are often but modifications of vaccine syphilis, leading on to softening and other morbid alterations of bones, consequent deformities, of mental and bodily import, in form of diseased enlargements of brain and skull, chronic hydrocephalus, in fact; and terminating in premature death, by means of pulmonary collapse, spasmodic croup, convulsions, eruptions on the skin, together with the exudation of albumen-like matter throughout the substance of the liver, spleen,

and lymphatic glands. "Why *do* you object to vaccination?" rings frequently in one's ear, and with this result in my mind. Why *do* not men think, read, and judge for themselves? As a matter of common sense and common honesty, no reasoner possessed of an impartial spirit, or with a true discernment of catholic logical inquiry, would hesitate to admit that whatever tends to deteriorate the constitution of healthy solids or liquids, is favourable to the formation of *hydræmic* or watery blood; in short, the tubercular products of vaccination, now figuring statistically in the nosological classes of the Registrar-General as scrofula, tabes mesenterica, phthisis, and hydrocephalus. Consumption consists of the presence of tubercle, not rarely of vaccine or bovine origin, and the destructive suppuration which thereby ensues in the lungs, or in those abdominal glands through which the chyle passes, and by which it is more highly organised before it enters the blood; whilst water in the head results, often simultaneously, from bovine deposits within the skull, on the brain, or its membranes. "Why *do* you object to vaccination?" Aye, verily, for a thousand and one reasons, scientific, ethical, and social; and had I none other it were sufficient to say, in sight of Truth and Justice, or the Religion of Humanity, that I have proved for myself, demonstratively, by numerous experiments, that the blood or lymph of a tainted person applied to a wound on a healthy one *is* capable of corrupting his whole system. I protest, therefore, that it is inevitable that all the secretions of sufferers from scrofula, consumption, and syphilis are truly poisonous, and this fact enables you and me to understand how and why compulsory vaccination has become a contaminatory process, formidable or abominable to all concerned. Not only do skin diseases, cough, diarrhœa, head-symptoms, and other disturbances follow vaccination ordinarily, but pro-vaccinators convey the venereal poison from *unseen* sores of syphilitic children to those that are perfectly healthy, by daily taking "vaccine lymph" from the arm of the one, and inserting it in the arm of the other, unconsciously. And even this calamity, alas, does not complete the tragedy. The newly-tainted child dies, when a few months old, of constitutional syphilis. When sucking its pabulum from the unfortunate mother, it infects *her* system through the nipples, and she, too, dies a miserable death, sooner or later, from the most loathsome malady with which humanity is afflicted; for, compared with vaccine syphilis, now made compulsory, directly or indirectly, small-pox itself, a remote contingency, that possibly may never happen at all, especially to those who appreciate good sanitary conditions, and lead wise and virtuous lives, Small-pox, I repeat, when compared with constitutional syphilis, as propagated by vaccination, is like the sweetest and loveliest blossom, that was ever washed with morning dew, or embalmed in the tears of the fairest rose! State-quackery attacks, by preference, the young and newly-born; neither purity nor innocence is defended from its wholesale, indiscriminate, corrupting influence; the strength of youth if often reduces to weakness; the healthy blood of the blooming virgin it converts to contagious poison; *it blights the infant in the womb*, its Protean form eludes detection by experienced eyes, and contaminates the very milk, as you have seen, drawn by the child from its mother's breast. These are the conclusions of scientific men, whose knowledge and experience of vaccination qualify them beyond interested *ex-officio* advocates to judge rightly of both sides of this national question. And so awful and hopeless becomes the physical and moral welfare of the coming race, if you do not rise in rebellion of heart and soul against the eternal procession of future generations of human beings through the same circle of sin and suffering, that it is calculated to destroy the faith of Liberals even in a "Liberal Government," and make us henceforth sink into the vortex of a desolate and paralysing scepticism, and no longer believe that England will ever be in harmony with those free and holy institutions that are alone compatible with the character and enlightenment of an advancing people.

[The foregoing was part of a recent speech of Dr. Hitchman's on "Medical Freedom *v.* Official Despotism"; and as several of his American friends are importuning him for articles wherewith to encounter the small-pox scare, and "run" upon vaccination throughout the Union, he earnestly desires them to reproduce in the press his testimony thus delivered.]

CEELY'S SMALL-POX COW-POX.

AT a meeting of the Royal Medical and Chirurgical Society, held on Jan. 26, 1841, Mr. Ceely, being questioned as to his newly-introduced small-pox cow-pox, replied:—

"In my own practice I have found no difference between the effects of the variolo-vaccine and the old vaccine matter; nor do I believe that the differences, when they do occur, depend on anything but the characters of the patients. I have been amused by the different accounts sent to me by various practitioners whom I have supplied with the new lymph. Some have written to me, saying they can discern no difference whatever between the effects of the new and old matter; others, that they find the new lymph more active and violent in its effects; while others, again, think its action even milder. I have no doubt that they are all right, and that the difference each has met with is due to the peculiarity of the soil in which the variolo-vaccine has been implanted."

MR. HENRY BERGH will have an answer to Dr. Austin Flint's article in favour of vaccination in the forthcoming number of the *North American Review*.

MR. W. J. COLLINS, M.B., in the course of the past month, has again brought the question of vaccination before the Abernethian Society. He also introduced a discussion on the same subject at the Birkbeck Institution, and carried the audience with him by a large majority. We wish we could convey to our readers an adequate idea of the wide and accurate information, the freshness, readiness, perspicuity, candour, and tact wherewith the advocacy of Mr. Collins is characterised. He meets and overthrows his antagonists fairly and indisputably, and with perfect good-humour.

INQUIRY IN NEW SOUTH WALES.

SMALL-POX is little known in Australia, and the recent outbreak in New South Wales created a scare that is now regarded with ridicule. The Ministry formed a commission of inquiry, and summoned fifteen of the leading medical men in the colony to assist with their advice as to compulsory vaccination. The evidence tendered has been printed at length as a parliamentary report, and to it we shall devote an article at an early opportunity. Never, perhaps, were legislators bewildered with such a mass of assertion, supposition, hearsay, and contradiction,—and all in the name of medical science! The single note of unison was the unspeakable blessing of vaccination, and the duty of Government to provide, pay for, and enforce it. As we read the unblushing recommendations to resort to compulsion, we discover afresh how superficial is the respect for personal freedom which it is the cant of our countrymen to profess. Such freedom as we enjoy is not the result of principle, but proceeds from a balance of forces—from the inability of rival parties to concur in the suppression of particular dissenters. Happily the medicine men did not have all their own way. Among the fifteen was Dr. John Le Gay Brereton, who testified bravely against vaccination (God bless him!), and his testimony has naturally excited interest and inquiry throughout the colony. The scare having subsided, the project of compulsion has for the present been set aside. Ere it is again revived, we trust means will have been taken to enlighten New South Welshmen upon the origin of small-pox, the impotence of vaccination to avert it, and the dangers of the practice. They have been caught unawares, but it is matter for hearty congratulation that they have not been hurried into an imitation of our infamous Vaccination Act.

PERSUASIVES FOR THE TIMID.

I WISH the Editor of the INQUIRER would prepare a short code of instructions for fond parents lately blessed with "an increase," who feel dubious as to vaccine risks; advising them that, at any rate, they may do *something* better than fall mechanically into the conventional routine, even though they may lack strength or pluck for a pitched battle and no surrender.

I feel sure we anti-vaccinators could make ourselves what the authorities would call "mischievous" by spreading the knowledge of what might be done by such parents if they would merely *hold back*. Their first step (if I may sketch my meaning) is that they forbid the doctor to insert virus in the new cherub. (2.) This would in due time bring a visit from the vaccination officer, to whom they would state their scruples, and with whom they might shuffle as best they were able, posing as "conscientious objectors," until he was tired of making visits and wasting his official stationery on them. In many cases the officer would at this point retire in disgust from that family. But (3) the parents, if it came to the push, might at least stand the brunt of a *first* summons. Let their former attitude be maintained before the magistrate. Their protest is worth *something*, even though under the usual light fine for a first offence a promise is exacted from them that they will forthwith submit to the *Law*.

But let us (as I believe we have grounds) hold out hope to these parents that, if they will stand the first penalty, and urge their fear of vaccine diseases, and do not make definite promise to submit to the poxing operation, there is a fair chance that proceedings at *this* point will be dropped, especially if they send some written protest or complaint to the Guardians, referring to the Evesham Letter as their warrant for forbearance.

Urge all parents, in brief, to *open* the campaign, the beginning not being an expensive affair; and when they are beaten, if in the end they do knock under, they may denounce, as loudly as they dare, the brute tyranny before which they have to bend.

It is something like getting recruits "under fire." Once there, many will show fight who were only timid at going in. At our house we have been bled by "the compellers" to the tune of some £40 to £50, and if we have been made to wince, we have still pulled through. Our vaccination officer, I believe, holds us up as a warning, as though there were no *middle course* between instant compliance and the certainty of £50 worth of fines. People are cowed, not knowing how much they may resist, and come off harmless at very little cost. S. P.

A PERTINENT QUESTION.—JENNER'S STATUE AT BOULOGNE.

IN reference to Sir John Risdon Bennett's article in the *Leisure Hour*, Mr. John Morison observes:—

"Sir John says, 'that if all Governments would exert themselves to procure the regular vaccination of all children born in their states, small-pox would soon disappear.' Then I ask him, how it comes to pass that the returns of the Small-Pox Hospital at Highgate show that 85 per cent. of the patients had been vaccinated?

"It is claimed that the French honour Jenner, and his statue in the market-plate of Boulogne-sur-Mer is pointed to as a proof of the national recognition of his genius; but I am informed that the said statue was subscribed for by some medical men in Paris, and offered to the Great Exhibition, but was refused admission. The mayor of Boulogne, a doctor, thereon volunteered to receive it, and had it placed where it now stands. It was *not* subscribed for by the inhabitants of Boulogne, and in no sense can it be described as a national tribute of respect."

MR. HOCKER addressed a meeting at Quebec Hall, Marylebone, on Jan. 15, on the varieties of vaccination, from horse-grease to pure lymph from the calf. There followed a lively discussion, and this resolution was carried unanimously:—"That from the alarming and authentic statements made by Mr. Hocker concerning the evils of vaccination, it is the opinion of this meeting that every effort should be made to resist the unnatural practice so unwisely maintained by Act of Parliament."

LUBECK EVIDENCE.

LAST year there was an outbreak of small-pox in the city of Lubeck. In less than three months there were forty-eight cases recorded on the municipal books; only one being unvaccinated; the remaining forty-seven being the vaccinated, the re-vaccinated, the newly-vaccinated, and the thrice-vaccinated. Eight died, but the unvaccinated infant recovered. It was the seventeenth case on the roll of sufferers, and it was not the first of the family to fall ill. At this period the number of unvaccinated children in the city and suburbs is officially given as 1,427.

Had the facts been the other way—had forty-seven of the unvaccinated been attacked, and only one of the vaccinated—what brilliant sarcasm there would be in the vaccinating journals! what singing of hallelujahs in the cow-pox camp!

D.

FINED THREEPENCE!

A VERY few of the *gentlemen* of the medical profession have signified their intelligent adherence to vaccination by returning my letter to Dr. W. B. Carpenter, which had been courteously sent to them, without paying the postage, thus punishing me for my heresy by a threepenny fine. Hitherto, all have been prudent enough to hide themselves behind the screen of the anonymous; but one braver than the rest has confessed his rudeness by sending his name and address. I enclose his communication. Please gibbet him in the next INQUIRER, taking care that he has a copy sent to him *post-paid*. P. A. TAYLOR.

Brighton, Jan. 6, 1882.

[Copy.]

"8, Denny-street, Tralee.

"Jos. Wm. Neligan begs to return with his Compliments enclosed Rubbish."

Mr. Neligan is Medical Officer to the Tralee Workhouse.

UTTER FAILURE OF ANIMAL VACCINATION IN THE SANDWICH ISLANDS.

The following letter appeared in the *Sydney Morning Herald* of Sept. 2, 1881:—

"SIR,—I have received from Honolulu some rather interesting particulars regarding the small-pox so prevalent there for the last twelve months.

"The Secretary of the Board of Health there writes as follows on Aug. 6:—'The total number of cases reported from Feb. 5 to Aug. 10, say for six months, was 788 cases; total number of deaths during same period, 289, about 37 per cent.; of these fully 70 per cent. were native Hawaiians, 12 per cent. Chinese, and the remainder spread over the whites and Portuguese. The natives, when taken promptly in hand at first symptoms, and well guarded and cared for, generally recovered; otherwise they exposed themselves during the fever, bathed during first stage of eruption; and, in most instances, the cases ended fatally. Very few patients outside of quarantine survived. Most of those who died in quarantine were those who were only discovered after four or five days' incubation."

The Group is reported by the district physicians to be thoroughly vaccinated and protected, so far as vaccination can protect, from small-pox. Humanised virus was forbidden by the Board of Health on account of the danger of communicating various disorders of the blood, and pure bovine virus was imported by the Board and supplied free. The importations were from Boston, Fond du Lac, Wisconsin, and Alameda (Cal.) Fully one-half of it proved inert; but Martin's, from Boston, was the most successful.

The cost to the Hawaian Government of the epidemic and measures for protection will exceed 100,000 dollars.

"Honolulu is now considered free from the disease.

"A. S. WEBSTER, H.B.M.'s Consul-General.

"Hawaiian Consulate, Sydney,

"Aug. 30."

This report from Hawaii confirms our predictions. Animal Vaccination, "pure lymph from the calf," &c., to the efficacy of which Warlomont, Martin, Cameron, and Drysdale are ready to swear, merely require to be put to the test of epidemics when, as in the Sandwich Islands, the imposture will explode beyond repair.

HOITY TOITY!

To Mr. William Young,
114, Victoria-street, Westminster.

Mill Bank,
West Derby, near Liverpool,
Jan. 24, 1882.

SIR,—You have been good enough to favour me with a post-card, indirectly suggesting that I should break the law of the land by refusing to vaccinate my child.

I am not aware whether the wording of this precious document brings you within the scope of a prosecution. I hope it does; though it is not my intention to undertake the functions of the Public Prosecutor, to whom I am forwarding it.

I trust that you will hear something from him on the subject that may not be altogether satisfactory to you.

Into the merits of vaccination, I decline altogether to enter into a controversy, but your gross violation of decency and propriety will, I trust, entail upon you more than private or public censure.

Personally, a fine, or an accumulation of fines, would be of little moment to me were I to follow the course to which your abominable suggestion points; but I must confess some curiosity on the point as to whether your proclivities for suggesting a transgression of the law extends to your affording assistance, legal or pecuniary, to those individuals, less fortunate than myself, to whom the cost and vexation of following your mischievous incentive to illegality might be of more moment than to

LLOYD RAYNER.

ANOTHER CARD.

To Mr. Young, Secretary, Society for Abolition of Vaccination, 114, Victoria-street, S.W.

I ADVERTISED the birth of my child as an intimation to my friends, and not for the purpose of being inundated with lies; and I wish a Society for the Total Abolition of Humbugs would transport all such Agitators as you to your natural soil, namely, Ireland—or further.

LEICESTER AND NOTTINGHAM.

THE Leicester papers print the Vaccination Officer's Return for the past year:—"3,978 Notices A served, 1,105 medical certificates for postponement obtained, 1,229 summonses. Two hundred and forty had been twice summoned, and 189 had complied."

Comparing this Return with previous years, we find that in 1879 the number postponed was 43, in 1880 it was 221, and in 1881 it rose to 1,105.

Also in 1879 the summonses were 114, in 1880 they were 294, and in 1881 they rose to 1,229.

The report of the Nottingham Medical Officer of Health for the week ending Jan. 14 is printed in the *Nottingham Daily Express* for Jan. 21, showing one death from small-pox and seventeen cases of the disease in the hospital.

It is said that other cases have occurred in private houses. We have not seen any statement that an unvaccinated case has been met with.

It is said that people are unwilling to send children to such hospitals; and the Nottingham papers contain a medical statement that nurses and others in a London hospital are exposed daily to infection in its most concentrated form.

If the Government would have the kindness to let Leicester alone, it would soon become virtually an unvaccinated community, the theoretical protection being theoretically lost in seven years. We should then be able to compare results with highly-vaccinated Nottingham. H. D. D.

MR. ELLISON AND THE EVESHAM LETTER.

MR. WALTER HASKER appeared at the Lambeth Police-court on Dec. 29, 1881, before C. E. Ellison, Stipendiary Magistrate, on an adjourned summons taken out by Mr. Inspector Stevens, on behalf of the Camberwell Board of Guardians, charging him with neglecting to have his child, Alfred Nightingale, vaccinated within three months from the date of birth. Mr. Hasker had previously pleaded "Not guilty," and after some preliminary objections, the case took the following turn:—

Mr. ELLISON.—Have you the Order in Council?

Mr. HASKER.—Here it is (handing up the General Order of Oct. 31, 1874). I should also like your Worship to look at this copy of a letter from the Local Government Board to the Guardians of the Evesham Union, dated Sept. 17, 1875, relative to the conduct of Guardians toward those who have been fined more than once for refusing to have their children vaccinated.

Mr. ELLISON (having perused the letter) said,—Mr. Hasker has already been summoned under the Vaccination Acts?

Inspector STEVENS.—Yes, sir; but for another child. The present summons has been taken out under Section 29 of the Vaccination Act.

Mr. ELLISON.—It seems to me that this is precisely one of those cases to which the Local Government Board refer in this letter to the Evesham Guardians.

Inspector STEVENS.—That letter is directed against repeated prosecutions.

Mr. ELLISON.—That matters not now. Since the Vaccination Act was passed, there has been an expression of opinion from the Local Government Board against the system of strictly carrying out the Act, that is, where reasonable objection may have been shown, and where there has been one prosecution already. Therefore, for the present, I think it would be well for the Camberwell Guardians to hold their hands, and to refer again to the Local Government Board, in order to see if this is not one of those cases which they consider within the expression of opinion in the Evesham letter.

Inspector STEVENS.—Would it not be desirable that there should be a conviction in this case first? It is not the practice of the Camberwell Guardians to summon more than once for the same unvaccinated child. When there has been a conviction under the 29th Section of the Act, the Guardians then let the matter rest. The Local Government Board do not wish the Guardians of any Union to repeat prosecutions after a first conviction; but in this case the prosecution is undertaken in respect of a child with regard to whom no legal proceedings have as yet been taken.

Mr. ELLISON.—But, even so, the Local Government Board may consider this a case where no prosecution should be instituted.

Inspector STEVENS.—The prosecution is in respect of another and a different child.

Mr. ELLISON.—But in the letter to the Evesham Guardians, the Local Government Board speak of "a persistent refusal to comply with the Vaccination Act," referring them to cases where the law is not observed from conscientious motives or reasonable objections.

Inspector STEVENS.—If that course were adopted, it would altogether defeat the object of the Act of Parliament.

Mr. ELLISON.—I have nothing to do but administer the law. The law is clear under the statute; but there have been Orders of Council to a different effect; and some Orders have the force of law; and I should like to see this letter embodied in an Order of Council.

Inspector STEVENS.—The Guardians of Camberwell feel it to be their duty to prosecute in this case under the 29th section of the Act; Mr. Hasker being the father of a child with regard to which he has neglected to comply with the law.

Mr. ELLISON.—There is no doubt that you have a case under the statute; but I cannot say that there is a case under the expression of opinion of the Local Government Board; and I feel the necessity of allowing weight to the objection urged by the Defendant.

Inspector STEVENS.—The considerations advanced in the Evesham letter have influenced the Guardians in cases where they have obtained convictions against Defendants. In all such cases, they have not continued the prosecutions. The Guardians have exercised the reserve recommended ever since the issue of the Evesham circular. In a very large parish like Camberwell, it is necessary that the law should be carried out under the 29th Section of the Act.

Mr. ELLISON.—As regards the Defendant, proceedings have been taken with respect to his other children. I think it would be better for all parties to rest on their oars for a short time. It is clear that the Local Government Board are inclined to allow weight to certain objections to vaccination; and such objections have been advanced in the present instance. Let the case therefore remain as it is for the present, especially as we may have something fresh in the way of direction from the Local Government Board.

Inspector STEVENS.—Then the case remains in suspense for the present?

Mr. ELLISON.—Yes; especially as we may have additional advice from the Local Government

Board. Moreover, magistrates do not like to convict where they encounter conscientious objections.

Inspector STEVENS.—The Guardians wish to press for a conviction in this case; and if a conviction were granted, they would be prepared to let the matter rest. I ask for a decision, as the offence has been proved. I feel that the result will be mischievous as concerns the working of the Vaccination Acts in Camberwell if, in a case like this, the Guardians are advised not to take proceedings at all.

Mr. ELLISON.—I recommend an adjournment for six weeks. In the meanwhile the Guardians may receive an expression of opinion which they may feel entitled to obey. It is very likely that the effect of an Order in Council will be against repeated prosecutions in cases like the present.

Inspector STEVENS.—The Evesham letter was issued some time since, and the Local Government Board have never discountenanced original prosecutions such as is now undertaken.

Mr. ELLISON.—The adjournment will do no harm. In the meantime the Guardians or the Defendant can communicate with the Local Government Board.

The case was then adjourned, Mr. Hasker intimating that he had not nearly finished his address for the defence.

LETTER FROM A SCHOOLMASTER.

I RECEIVE many letters like the following, of which I do not attempt to make use, simply because it is not possible for me to vouch for their correctness. The enclosed, you will see, comes with authority, although I cannot venture to publish the name or the precise school. With such possibilities, is not compulsion an act of atrocious tyranny? P. A. TAYLOR.

Brighton, *Jan.* 11.

"SIR,—Always opposed to vaccination, I have read your letter 'On Current Fallacies about Vaccination' to Dr. Carpenter with much delight. A case came under my notice this morning where disease, according to the doctor's own evidence, was the direct outcome of vaccination. A lad who has been absent from school five weeks has, even now, his head and limbs covered with a most virulent eruption. The boy states that he saw the doctor this morning, who said that the disease was the result of vaccination.

——, Head Teacher, Board School.

"P. A. Taylor, Esq., M.P."

DO NOT FORGET TO PETITION.—Mr. James Dewhirst, of Failsworth, writes:—"We are getting up a numerously-signed petition, to be ready when Mr. P. A. Taylor brings on his motion in the House of Commons; and it is to be hoped that our friends all over the country are exerting themselves in the same way. Mr, Taylor cannot be too energetically backed with petitions."

A FINE NOSE.—A woman from Osett, 51 years of age, recently died of small-pox in the Dewsbury hospital. She said she was vaccinated, and was entered on the register as vaccinated, but the doctor affected to doubt the evidence, and wrote in the certificate of death "Vaccination doubtful." When pressed by the Guardians for the reason of his scepticism he replied, "Her *smell* convinced me that she was not vaccinated!"

A WILD IRISH VACCINATOR.

AT the meeting of Clonakilty Guardians, on Jan. 21, a report was furnished from Dr. Garde, medical officer of the Timoleague Dispensary District, to the effect that from the 20th of October to the 11th of December, he vaccinated 1,248 persons, 9 of whom were children under three months. The fee in each case was 2s., and the whole sum amounted to £124. 16s. 1d. Mr. O'Brien said it was the most extraordinary thing he ever heard to have a doctor go round the country, and into the National Schools, vaccinating and re-vaccinating children, without any authority from the Guardians, or knowledge of the children's parents. About the time there was a clergyman from England in the locality who died of small-pox, vaccinated though he was, but only three persons took it after his death.

Mr. M'Carthy—It was an easy way to earn money—a very paying game.

After some discussion, the following resolution was carried unanimously:—"That we desire to draw the attention of the Local Government Board to the report of the number of persons vaccinated and re-vaccinated in the Timoleague district, and that in the opinion of this Board, the Doctor acted illegally in going into the National Schools within his district to re-vaccinate children without the knowledge of the Board or Dispensary Committee."

VACCINO-SYPHILIS.

THE following is a list of well-authenticated and published cases of vaccino-syphilis. For every one such case there must be several that are never discovered, and many which, though discovered, are not published.

The following are given by Lanceraux in his work on Syphilis (p. 243, vol ii.):—

By Cerioli	40	At Rivalta	46
„ Tassani	46	By Trousseau	1
„ Surgeon B.	19	„ Maronni	34
„ Hübner	8	„ Devergie	1
„ Monell	1	„ Chassaignac	1
„ Marcolini	40	„ Hérard	1
„ Viani	2	„ Adelasio	2
„ Lecoq	2		
„ Galligo	14	Total	258

To these may be added the following cases:—

By Hutchinson	24	By Depaul	59
„ T. Smith	1	„ Sebastian	1
„ Hulke	1	„ Collins	2
„ Oldham	3	„ Fuqua	52
At Lebus	18		
		Total	419

And yet there are some even in the medical profession who, according to Mr. Hutchinson, are "either uninformed or unconvinced," and others who affect to talk of the danger as "infinitesimal!"

W. J. C.

VACCINATION never protects against small-pox, but helps to magnify each danger in the life or health of thousands. Further, it is nothing but a blood-poisoner, and to believe that such a thing can render the organism proof against small-pox is unreasonable. On that account it is also a mistake to believe that the usefulness of vaccination can be proved by statistics. Honest and rational statistics prove only the pernicious effects of vaccination.—*From* CARL LÖHNERT, *the Statistician, Chemnitz, Saxony, to William Tebb, Dec.* 29, 1881.

ANOTHER VIEW OF THE QUESTION.

MR. P. A. TAYLOR, in a letter to the *Echo*, of Jan. 17, observes:—

"The upholders of Vaccination, in their statements to show the efficacy of Vaccination, always claim credit in cases where a person who has been vaccinated does not take small-pox, totally ignoring the fact that the great majority of persons escape small-pox whether vaccinated or not. This is as ridiculous as if some quack were to advertise a medicine as protective against hydrophobia, and then say the value of his nostrum was proved because nobody who had taken his prescription had gone mad.

"In last century in London, unprotected by vaccination, when sanitary conditions were much worse than now, the highest mortality by small-pox in any year was under 4,000; the number of deaths to cases was about 20 per cent. The highest number of cases ever known in the eighteenth century, therefore, would be about 20,000, out of an estimated population of one million—amounting to 1 in 50; in other words, 20,000 persons were attacked, and 980,000 escaped.

"I see the chairman of the Fulham Hospital Committee declares the value of vaccination to be proved, because out of 295 officers and nurses, only four had taken small-pox, all having been re-vaccinated. Had he taken into account the ratio of four out of 295 as compared with the totality of cases to the whole population, he would have found that the former was far in excess of the latter, and that, in fact, his four cases were much nearer the ratio of cases to population as it existed in the worst epidemic of small-pox in unprotected London last century."

CHARACTER OF VACCINE VIRUS.

WHO can guarantee that lymph which has passed through countless constitutions during the last four-score years is free from syphilitic, erysipelatous, tuberculous, or pyæmic contamination? It has been feebly and most unphysiologically urged that as long as the lymph is free from admixed blood, it is free from the risk of such contamination. But where does the lymph come from if not from the blood; and if that be polluted, are we to expect that its offsprings, the serum, and the secretions are pure and undefiled? And, for the matter of that, I have myself discovered red and white blood-corpuscles in pure lymph direct from Whitehall. Such *à priori* suspicion is justified by statistical facts, which show that while infantile mortality from all causes has declined, that from inoculable diseases has very considerably increased; surely that points to an inoculable cause, and what is that cause if not vaccination?—W. J. COLLINS, M.B., B.S., B.Sc., in the *Students' Journal and Hospital Gazette*, Jan. 21.

SWITZERLAND.

READERS of the INQUIRER may have been better informed than myself, but I confess to some surprise at reading the following, which I translate from *La Semaine Française*.

"VACCINATION.—The National Council have debated the law upon epidemics. After having heard Messieurs Brugisset and Tschudi, the Council has adopted by 90 votes against 23, the principle of compulsory vaccination. Articles 13 and 14 of the law upon epidemics, which has been passed, run as follows:—

'Article 13. Every child born in Switzerland ought in due course to be vaccinated within the first year of its life, or at the latest in the second. An adjournment beyond this is only allowed by reason of its health as certified by a doctor. Children born abroad and brought into Switzerland are submitted to the same regulations. The fact of vaccination will be stated by a licensed doctor on a certificate.

'Article 14.—No child can, without this certificate, be admitted to frequent either a public or a private school.'"

It is curious how savagely severe Republicans can be, acting on fear and ignorance, when they are strongly moved. New York, San Francisco, and now Switzerland, are in this matter setting an example which nowhere but in Russia has been more rigorously followed.

Will they follow this lead in New South Wales? There, as here, a few interested officials, or authorities, or doctors, give "opinions," often in downright defiance of every experience, modern or ancient, and the liberty of the subject is gone.

A. WHEELER.

CLERICAL CRUELTY.—It is characteristic, and far from creditable, that wherever a parson appears on a Board of Guardians his voice is almost invariably raised for extreme and violent courses. None can have forgotten the hysterical fury of Parson Beck over Mr. Escott's case; and in the *Eastbourne Chronicle*, of Dec. 24, there is a report of a meeting at which the Rev. T. Pitman exercised his influence for the vindictive prosecution of a number of humble folk at Eastbourne whose love and convictions are concerned in preserving their children from vaccine pollution. Remonstrance, we know, is in vain. The clerical fanatic treats reason, science, and the mercy of good sense as temptations of the devil. Nevertheless, the fact of clerical behaviour in such respects is worth noting for remembrance and policy.

THE COLOGNE INTERNATIONAL ANTI-VACCINATION CONGRESS.—Many of the addresses and papers have been published in German, and a complete report of these important proceedings is now being prepared by Dr. Oidtmann, of Linnich, Aix-la-Chapelle. We are also gratified to hear that the President, Dr. Hubert Böens, of Charleroi, Belgium, is preparing an edition in the French language. These reports will furnish most valuable compendiums of the legal, social, political, statistical, and medical facts of our contention, and should be extensively distributed. The price will be as moderate as circumstances will allow, particularly when a number of copies are ordered.

POSTERS.—Several correspondents having intimated that, in their opinion, the objects and interests of the Society will be promoted by the frequent and judicious display of bill-posters, the committee have issued a set of three, which they hope will meet the wishes of friends. Where practicable, it is suggested that these posters be put up side by side with parochial and other notices recommending Vaccination, that the bane may be neutralized by the antidote. They might also be utilized with good effect on the occasion of Lectures or Public Meetings, or mounted on boards to perambulate crowded thoroughfares. Price 1d. each, or 2s. 6d. per fifty. Mr. Young will send specimen copies on receipt of addressed envelope.

He who knows only his own side of the case, knows little of that.—J. Stuart Mill.
Prejudice, which sees what it pleases, cannot see what is plain.—Aubrey De Vere.

The Vaccination Inquirer

And Health Review.

Vol. III., No. 36.] MARCH, 1882. [Price 1d.

NOTES OF THE MONTH.

Stuart Mill taught that a doctrine is never judged truly until it is judged in its best form—an admirable maxim, but difficult, like so many other admirable maxims, to reduce to practice; for who shall determine what is the best form of any doctrine? The doctrine of vaccination, for instance, has several forms, and the variety is constantly increasing; and with all goodwill to discover the best, it is possible to be told of any selection that it is obsolete, or exploded, or questionable. The Committee of the London Society for the Abolition of Compulsory Vaccination, intent on bringing Vaccination to judgment, were, therefore, at a loss how to comply with Mill's chivalrous maxim; and feeling their incompetence to arrest the doctrine in its best form, took another course, and resolved to invite the most prominent representative and champion of the practice, namely, Dr. W. B. Carpenter, C.B., to the Society's monthly conference, so that he might set his form of the doctrine plainly before the members, with a view to discussion and the formation of sound opinion. Dr. Carpenter kindly assented, and in Steinway Hall, Marylebone, on February 3, under the impartial presidency of Dr. Andrew Clark, the end desired was accomplished, as the ample report in the following pages attests. That the Committee did not resort to Dr. Carpenter unwisely is proved by a critic so competent as Dr. Drysdale, who was pleased to say that he had never heard the case for vaccination expounded with more cogency and accuracy. It is no small matter to have achieved so much—to have our adversaries' case set fairly before us with such consummate ability and authority. If we answer Dr. Carpenter, it cannot be said that we are dealing with figments of our own fancy. We know how hard it is for us to obtain attention and impartial consideration, and we cannot act more wisely than by exhibiting in our own conduct that virtue, the absence of which we have so frequently to deplore in our opponents.

Dr. Carpenter commenced by replying to Mr. Tebb's eloquent protest against the iniquity of compulsory vaccination. Since we compel parents to have their children educated, why should we not compel them to have them vaccinated? This reasoning is by no means uncommon, and appears to be thought forcible, but it is based on a fallacious analogy, for which Dr. Carpenter himself provided the means of exposure in saying, "Nobody doubts, or scarcely anybody, the desireableness of compulsion in the matter of education." Just so: and therein is the difference. As nobody pretends that reading, writing, and arithmetic can harm a child, or maintains that it is right that a child should grow up in ignorance of these elementary arts, so no conscience is offended by their compulsory acquisition. It is far otherwise with compulsory vaccination. Whereas nobody doubts the desirableness of education, thousands not only question the efficacy of vaccination against small-pox, but are persuaded that it is a most pernicious practice. Here, then, a conflict is set up with parents whose intelligence, sincerity, and affections are vitally involved. If they defy the law, they are subject to fine or imprisonment; if they yield, it is with a sense of outraged conviction that does not make for loyalty and peace. To compare, therefore, a non-existent resistance to education with an active and scientific resistance to vaccination, is to conjure up an odious dummy in order to discredit a sentient adversary. As soon as a Society for the Abolition of Compulsory Education is established, it will be time enough to deal with its arguments. When a philosopher like Mr. Herbert Spencer puts on record his strong opposition to compulsory vaccination, and a statesman like Mr. Bright stigmatises the compulsory law as monstrous, which ought to be repealed, it is easy to see that the suggested analogy between opposition to vaccination and opposition to education is what is known as drawing a red herring across the scent.

But Dr. Carpenter's argument, such as it is, is still more grossly at fault. If the question as to

what is most precious in education were submitted to the House of Commons, the judgment of the vast majority would go for religion. If a choice had to be made, many would say it would be better far for a child to be well instructed in religious truth than to be informed with any quantity of secular knowledge. And yet it is just here, in that portion of education which is confessed of supreme importance, that compulsion is withdrawn, and the parent recognised as the plenary representative of his child. The conscience of the parent, whether Conformist or Nonconformist, Catholic or Jew, is treated with absolute respect. Nay, more: the teaching of any religion whatever is not insisted upon, and the children of agnostics and atheists may grow up exempt. It is in the precedent thus established that we claim a similar liberty for conscience in the matter of vaccination. Those who believe it can fortify them against small-pox, cannot at the same time assume to suffer harm from those who refuse it as an injurious superstition. As Mr. John Morley says, "Where the law comes into conflict with the consciences of men, it is the law that should be altered, and not conscience that should be forced."

Dr. Pearce has elsewhere dealt with the chronological Table of London Mortality, exhibited by Dr. Carpenter with judicious omissions. The intention of the recital of these statistics is to appal the imagination. "See," it is said, "what havoc small-pox formerly wrought in London, and thank God for vaccination;" but before dropping on our knees for that special mercy, we have a few remarks to make. Small-pox, we allow, was bad—very bad; but considering the insanitary condition of eighteenth-century London, the wonder is that it was not much worse. But Dr. Farr, to whom we owe the Table, makes a noteworthy observation. He says:—

"Small-pox attained its maximum mortality after inoculation was introduced. The annual deaths from small-pox in London, 1760-79 were 2,323; in the next twenty years they declined to 1,740; this disease, therefore, *began to grow less fatal before vaccination was discovered;* indicating, together with the diminution of fever, the general improvement in health then taking-place."

Thus a fall in small-pox had set in before vaccination was introduced—a decline, too, that was coincident with the most extensive culture of the disease by variolous inoculation. Before budging an inch, therefore, in the way of thanksgiving, we insist on having this fall accounted for. It cannot be ascribed to vaccination, and to thank Heaven for a fictitious cause would be impious. Vaccination was introduced in 1800, and "See," cries Dr. Carpenter, "the small-pox mortality in the succeeding decade dropped to less than half!" Dear Friend, we reply, the introduction of vaccination did not imply its application. If we concede that 50,000 Londoners submitted to vaccination between 1801 and 1810, we make a liberal concession, and we ask how the vaccination of, say, 100,000, could have affected the yield of small-pox mortality from a population of 1,000,000, in the course, too, of ten years? Does Dr. Carpenter believe in Vicarious Vaccination?—that the vaccination of a few propitiates the god of small-pox in favour of the many? If he does, let him say so, and then we shall begin to understand him. For ourselves, we recognise in the fall of small-pox between 1801 and 1810 simply a continuation of the fall that had set in twenty years before, assisted, we daresay, by the decrease in variolous inoculation by the rumoured magic of cow-pox. For these reasons we therefore hold that we have no call to be thankful for vaccination.

Another trick is to spread the terror of London small-pox over the country. The year of extreme metropolitan mortality is selected, rounded as 4,000, multiplied by the population of the United Kingdom, and the result set forth as the constant variolous death-rate of the entire land! Thus the National Health Society scatters tracts like snow-flakes, wherein it is asserted that 40,000 persons died annually of small-pox in Great Britain prior to Jenner's advent. A statement so demonstrably untrue is only to be characterised by one word. London small-pox is not, and never has been, the standard of provincial small-pox. In London the disease is endemic, waxing and waning: in the country it has been, and is, sporadic and epidemic. In a letter to the *Echo*, Dr. Carpenter admits that as the London death-rate of last century greatly exceeded the birth-rate, the population could only have been maintained by continual drafts from the country. London last century consumed its inhabitants—slaying more than it bred. It is of great importance to bear this fact in mind, and to refuse to convert London mortality into national mortality. Dr. Carpenter appears to think that he adduces overwhelming evidence in favour of vaccination, when he shows that in certain cities there has been no small-pox for a number of years, whilst the disease continues "to smoulder among the unvaccinated residuum of London." We reply that the same phenomena existed before vaccination was

ever dreamt of. Norwich was formerly, after Bristol, the chief city in England outside the metropolis, but in Norwich year sometimes followed year without a death from small-pox; and what was true of Norwich was true of many smaller towns, and still more of the rural population, which then constituted a much larger relative proportion of the people than at this day. Wherefore we hold that the absence of small-pox from Plymouth or Manchester or Newcastle or Glasgow or Aberdeen is no proof whatever of the prophylaxy of vaccination, but is simply the continuance of well-recognised phenomena from pre-vaccination times. To say that small-pox is stamped out anywhere because it happens to be absent, is to forget its epidemic character. It was stamped out in Sweden, "the best vaccinated country in Europe," and Sweden was used to stop every unbeliever's mouth. But, by-and-by, small-pox reappeared in Sweden with its ancient vigour and venom, to the utter confusion of the vaccination prophets. When Dr. Carpenter, therefore, asks us to consider and account for the disappearance of small-pox from this place and from that, we ask him to remember Sweden, and to moderate his tone.

Dr. Carpenter's historic survey covered well-known ground, and was relieved with sundry touches of amusing *naïveté*. Still we have to ask, to what purpose is the recital? Admitting in full the horrors of London and Parisian small-pox in high life, what then? They were the appropriate consequences of modes of life, which, however brilliant on the surface, were foul beneath. Queen Mary died of small-pox, but would Queen Victoria, asked Dr. Carpenter, keep away from Buckingham Palace if small-pox were prevalent in Pimlico? We expect she would; for with the profession of unbounded confidence in the protection of vaccination, there is nowhere any living faith in its security, and were it non-existent, the dread of the disease could hardly be more intense. As for Queen Mary, we shall not attempt to describe her domestic arrangements. She lived in a palace; but such an atmosphere as pervaded her apartments would revolt the stomach of a modern chambermaid. "Anybody who knows Evelyn," remarked Dr. Carpenter, "knows that he was not a man to be living under bad sanitary conditions, yet his daughter died of small-pox." Where is the warrant for the assumption? A century intervened between Evelyn and Jenner, and Dr. Carpenter might as reasonably aver that Jenner was not a man to live under bad sanitary conditions, and yet his house at Berkeley was haunted with typhus, and deadly as a Liverpool cellar, or a flat in an Edinburgh close; and yet Jenner had no suspicion that the situation was capable of amendment, but accepted the frequent fever as a dispensation of an inscrutable Providence. Let us beware of anachronisms in sanitary history. Dr. Carpenter is never so piquant as when positive, and positively wrong. Anxious to establish the London Bills of Mortality as veracious registers of small-pox, he had the temerity to adventure this assertion:—

"There is this peculiarity about London and its records of small-pox—everybody knows that there were bills of mortality furnished by the parish clerks, collected together, and published weekly. There was a great deal of mistake about the various diseases. Small-pox was, however, universally known and recognised. There was no disease about which there could be such entire absence of any mistake whatever."

So far from small-pox being thus unmistakably recognised, it is classified with measles in a series of the Bills for the latter part of the seventeenth century, as if which was which was beyond recognition, or matter of indifference. To come, however, within closer range of experience, let us inquire to whom was committed the definition of the causes of death. Dr. Carpenter is surely not unaware that physicians in the times under discussion were a luxury of the rich, and that the great majority entered and departed this life without professional assistance, whilst the causes of death were left to the definition of the women in attendance upon the sick. To prove this assertion, we cite the contemporary testimony of Isaac Massey, apothecary to Christ's Hospital, who, writing in 1723, observed:—

"These London Bills of Mortality are founded on the ignorance or skill of old women, who are the searchers in every parish, and their reports (very often what they are bid to say) must necessarily be very erroneous. Many distempers which prove mortal are mistaken for the small-pox—namely, scarlet and malignant fevers, with eruptions, swine-pox, measles, St. Anthony's fire, and such-like appearances, which, if they destroy in three or four days (as frequently happeneth), the distemper can only be guessed at, yet it is generally put down by the searchers as small-pox, especially if they are told the deceased never had them."

In the light of this perspicuous bit of evidence, it is discovered (if hitherto unknown) how very sure Dr. Carpenter can be when he and matter-of-fact are widely at variance.

Leaving these antiquarian considerations, we are brought to a present-day question in the ascription of exceptional malignity to the small-

pox that has prevailed since 1871, with its derivation from the Franco-German War. We understand this pretty theory originated in the Medical Department of the Local Government Board, and was devised to account for the conspicuous failure of vaccination to resist the epidemic. Dr. Ballard argued plaintively before the Cow-Pox Conference that the Jennerian rite should not be charged with impotence because it broke down under the terrible French onslaught. When small-pox was absent, vaccination kept it away; and when present, it didn't; but what else could reasonable vaccinationists expect? What indeed! As for the importation of the French pox, it is conveniently forgotten that, as Mr. Marston told a committee of the House of Commons, small-pox was raging in the east of London before the French War broke out. The freaks of small-pox are infinite, and it is possible that the French variety came over, jumped on the back of the English, and intensified it. Dr. Drysdale is, however, of a different mind. He attributes the recent virulence of the disease to the degeneration of the virus used for vaccination—a degeneration which many vaccinators say is the fruit of his own active fancy. To decide where doctors differ is well known to be Quixotic, and we would merely point out that whatever character small-pox may have acquired, the returns plainly show that the ratio of mortality to cases is unchanged; that is to say, 1,000 cases of small-pox at this day practically result in the same number of deaths as a century ago. Dr. Carpenter, however, presents us with this *crux*, and defies us to offer a solution that does not concede the efficacy of vaccination; namely, that during the past year there was not a single death in the Small-Pox Hospitals of a well-vaccinated subject from the hæmorrhagic or petechial form of the disease. This we merely take as the last flagrant instance of the statistics with which we are continually assailed, to the effect that the death-rate from small-pox of vaccinated Londoners is 8 per cent., whilst the unvaccinated die at the rate of 44 per cent. Were such statistics true, our case would be bad indeed. We shall ask in vain for a definition of what Dr. Carpenter styles, "a well-vaccinated subject," and for an answer to the question, Who are the unvaccinated? The unvaccinated in hospitals are necessarily the miserable and homeless, who, with whatever disease afflicted, would exhibit a larger mortality than the vaccinated. Beyond this weighty consideration, however, there is another, which reduces to absolute insignificance the awful examples which Dr. Carpenter produces for our confusion.

This consideration is the rule whereby in hospital and parochial cases the vaccinated and unvaccinated are discriminated. The existence of the rule had long been suspected and suggested, but, so far as we know, it was for the first time cynically avowed by Mr. Francis Vacher, in his report of the Birkenhead Hospital. It is stated thus:—

> We do not mind what a patient says, nor what his friends say, of his vaccination. We look at his arms, and if we see vaccination marks, he is entered as vaccinated; but if we see no vaccination marks, he is entered as unvaccinated.

Under this rule, the consequence is obvious. *All* severe cases of small-pox are entered as unvaccinated, the eruption rendering the marks indiscernible. And it is under this rule that the Munchausen statistics we have referred to are ever and anon shot forth upon a credulous public. To discuss them is waste of breath. They are beneath contempt. The cards are marked, the dice are loaded, the balance is false. We exempt Dr. Carpenter from knowledge of the imposture, though a life-time spent in scientific pursuits should have taught him circumspection. His zeal for vaccination has betrayed him, else his honoured name would never have been inscribed on the flash notes of the Vaccination Ring.

WHAT Dr. Carpenter hoped to achieve by his reference to San Francisco was not apparent. The Chinese colony attached to that city, described as unvaccinated and pigging together, do not seem to come to deadly harm even with small-pox "smouldering among them." Any outbreak of the disease among the American citizens is, of course, ascribed to them, whilst its presence is used to terrorise and drive the trade in "heifer-lymph." It is very droll—an entire community in healthy circumstances consenting to be corrupted and sickened in order to escape from a disease which, at the worst, could only "catch" an inconsiderable minority. It is pretended that the general vaccination keeps off the small-pox, but that is precisely what we dispute. We challenge Dr. Carpenter to bring forward any population existing anywhere, at any time, under fair sanitary conditions, to whom small-pox has proved a serious affliction. On the one hand, it is idle to point out cases of zymotic disease in what he calls "the upper crust," as at Nahant; for it is possible to live in a very fine house and be no better off in sanitary respects than a resident in a slum. On the other hand, we have to recognise the possibility of even prolonged existence in unsanitary circumstances

with impunity; for not until an epidemic supervenes may the peril of the situation be revealed. There are mysteries in the generation and propagation of fevers, but this is clear, that in the maintenance of health in the conditions of health, or, in a word, sanitation, there is a universal and benign prophylaxy, by the side of which vaccination is a vain and disgusting superstition.

FINALLY, let us say, Dr. Carpenter's discourse will go far to confirm our friends in their opposition to vaccination, and will lend fresh energy to their exposure and denunciation of the practice. They have seen what the foremost English physiologist can advance in its defence, and they see, with all his ability and resources, how inadequate that defence is. Still, it is for us to bear in mind the caution of Coleridge, "Measure not the strength of your own cause by the weakness of your adversary's." It may be that there is more and better to be said for vaccination than even Dr. Carpenter was able to advance. If it be so, it is for us to give the superior argument our careful attention; and speaking for the Executive Committee of the London Society, we may unhesitatingly promise that if any champion of vaccination feels that the case may be established on better grounds, or in a different light, they will gladly hear from him and arrange to give him audience. It is the truth they seek, and the truth they would establish; and the means to truth consist in free and fair discussion. If, unfortunately, we have had to write of some points in Dr. Carpenter's contention with acerbity, it has been with no personal dislike. On the contrary, we entertain a vivid admiration of the courage with which, in the phrase of Dr. Andrew Clark, he entered the lions' den, nor failed to command the lions' respect.

VIEWED at large, this vaccination agitation is an educational work—a training in accurate observation, accurate thought, and accurate speech. Any working-man, for instance, who enters into the discussion cannot fail to acquire a new sense of the distinction between fact and fancy, which he will bring to bear in other affairs—social, political, and religious. Nor is it working-men alone who will be affected. Mr. Samuel Whitbread passes for an M.P. of more than average intelligence, and in addressing his constituents at Bedford the other day, he said, in refusing to vote for Mr. P. A. Taylor's motion for the repeal of compulsory vaccination:—

"I feel convinced that vaccination properly carried out, not improperly carried out, properly performed, with proper skill [A Voice: By Whom?], and with proper materials, has been the saving of millions of lives in this country."

Observe the nice derangement of conditions. He prescribes vaccination of an ideal character, and then asserts that the said impracticable vaccination has saved millions of lives in this country! The early vaccinators, who were prone to romance, were pleased to conceive the annual mortality from small-pox in the United Kingdom as ranging from thirty to fifty thousand, which by their magic they proposed to abolish. 40,000 was the favourite figure, and 40,000 passes current in vaccination literature to the present day. Vaccination did not, however, exterminate small-pox as predicted, and a large portion of the imaginary 40,000 continued to perish. But supposing the imaginary 40,000 had been saved, how many years would the salvation have had to run ere Mr. Whitbread's imaginary millions were attained? Mr. Whitbread is equal to the calculation, and when accomplished, he may possibly exclaim, "Confound it! Have I been making an ass of myself?"

MR. WHITBREAD may, however, console himself in that he is not alone in his folly. The *Lancet* is written by medical men for medical men, and turning to the number for Feb. 11, in which is a notice of the London Society's conference in Steinway Hall, we read:—

"About 90 per cent. of persons in an unvaccinated community exposed to small-pox will catch it. From a third to a half would die, and the rest would be marked for life."

Comment is superfluous. We have here a notch above even Mr. Ernest Hart's mark, and the *British Medical Journal* is left in arrear. When medical men can vend and consume such preposterous trash, the excesses of M.P.'s may pass as venial.

ZYMOTIC DISEASES, while they are not confined to any age, affect specially persons of tender years. Thus, in 1879, there were recorded 81,274 deaths from these affections; and of these, no fewer than 71,016, or 87 per cent., occurred among children and persons under thirty-five years of age. There can be no doubt that any saving effected in the rates of mortality from zymotic diseases must mainly affect young lives; and therefore, no doubt, it is that the improvement in the rate of mortality from these affections, and the saving of young lives, have gone on simultaneously. There is, however, still very much room for improvement in both these directions; for in all England there still die 293·5 children out of every 1,000 born, before they attain the age of five years. In the towns, the numbers are even larger; for in London about 370 children, out of every 1,000 born, die before they reach the age of five years, and in Bradford 441.—A. RABAGLIATI, M.D., *Surgeon, Bradford Infirmary*.

DR. W. B. CARPENTER, C.B., F.R.S.,

At the Monthly Conference of the London Society for the Abolition of Compulsory Vaccination.

By the invitation of the Executive Committee of the London Society, Dr. W. B. Carpenter kindly consented to lead off the debate at the Monthly Conference with a paper entitled, "The Increase of Small-pox Mortality in London during the year 1880, without any corresponding increase in other parts of the Kingdom, a reason—not for a repeal of the Compulsory Vaccination Act—but for increasing the efficiency of its operation." The meeting was held in Steinway Hall, Portman-square, on Friday evening, February 3. The chair was occupied by Andrew Clark, Esq., M.D., LL.D.

The CHAIRMAN: Ladies and gentlemen, The subject which we have assembled to discuss—that of compulsory and non-compulsory vaccination—is among the most important that at present engages the minds of thoughtful men. It is a very difficult subject; there are difficulties which are inherent to the subject; there are difficulties surrounding it and inseparable from it; and, worst of all, there have arisen difficulties which we ourselves on both sides of the question have added to the inseparable difficulties. We have permitted the element of emotion to enter into the discussion: and whenever that element does enter into the discussion of purely intellectual questions, it always disturbs the discussion; it blunts our perceptions; it lessens our charity; it alters our judgment; and, do what we will, whenever this element is largely present, it is almost impossible to get at the truth. Now, there is no shirking the fact that on both sides of this question that element has been permitted to enter too largely. I do not say which side is the worse. I am not here to speak on that matter; but I do say that both sides have erred; and if now and again one hears vaccinators talk of anti-vaccinators as fanatical and foolish, why then we see the anti-vaccinators repay them in kind by saying that the ground for their opinions is the money they get for vaccination. Now that is not the attitude of mind which we should present to this question; that is not the attitude of mind in which we can have any hope of getting at the truth; and I hope that all who are assembled here this evening for the purpose of discussing a very important part of the subject, will address themselves to it in that quiet, calm, even temper which every man who knows anything about scientific inquiry knows to be necessary for success. One thing I do ask—because you do not all know Dr. Carpenter as I know him—and that is to give him the credit which you claim for yourselves. That is a very small matter. You believe yourselves to be sincere, and I believe you to be sincere—you who are on the opposite side of the question; and I pray you to give to the other side that same credit for sincerity which you claim for yourselves. It is peculiarly happy that I should be here to-night, for I look upon Dr. Carpenter as one of the most valuable teachers that I ever had in my life. He does not know it, but I owe him a great deal; and I look back to-night to twenty years ago, when I used to have the privilege of walking with him from the London Hospital, where he was our great teacher of physiology, to the West-end, and well did we enjoy it. Therefore it is an extreme pleasure to me to come here to-night after such a long time to hear him speak upon this important subject. He is, you all know, the father of English physiology. He is known throughout Europe as a man of varied and of profound knowledge, a man of a judicial temper of mind, and a genuine lover of truth. These are qualifications which it is almost impertinent in me to allude to in his presence, but they are known, and I venture to allude to them that you may remember them in listening to him. And now, that the discussion may be kept within reasonable and profitable bounds, I will, with your permission, read a letter which Dr. Carpenter has handed to me in order to show precisely the lines which he takes in his paper to-night; and I trust that these will be kept to in the course of the replies which you may see fit to make. He writes:—

"I think it well that you should know that I intend this evening to confine myself to the London experience of small-pox and vaccination, as shown—first, in the progressive reduction of the small-pox death-rate just in proportion to the spread of vaccination, which brought it down from more than 4,000 per million (leaving out the increase attributable to inoculation in the last and at the beginning of the past present century) to 276 in the decade 1861-70. Secondly, I shall then show that the decade 1871 to 1880 has been altogether exceptional, in the malignant character of the small-pox imported from France after the war. This has spread over Europe and the United States, everywhere showing the like severity; and the London outbreak of last year retained, as I learn from the medical superintendents of the small-pox hospitals, the like character, a considerable number of fatal hæmorrhagic cases still occurring, and running up the mortality of the unvaccinated. (3.) But, notwithstanding this, in the latter part of the decade the small-pox mortality of Scotland, where vaccination is well enforced, has been almost *nil;* and this is true also of Provincial England, including our great towns. No general outbreak took place anywhere last year, the small-pox mortality being somewhat augmented in the southern metropolitan area. (4.) I affirm, then, that the exceptional condition of London is mainly due to the Anti-vaccination propaganda. (5.) I cite a most interesting recent outbreak of small-pox in San Francisco; showing that general sanitation, or position in society, has little or no influence on the propagation of small-pox, and evidencing, most remarkably, the protective influence of vaccination. (6.) And lastly, I shall finish with some particulars of the epidemic of 1881, replying to some objections raised to former statistics."

Before calling upon Dr. Carpenter to read his paper, I shall ask Mr. Tebb to explain the aim and objects of the London Society for the Abolition of Compulsory Vaccination.

MR. TEBB.—Mr. Chairman, ladies and gentlemen, it is customary at these monthly conferences of the London Society, to give an account of the progress of our agitation. On the last occasion, some information was given relative to the recent International Congress at Cologne, and also the result of the Congress held in the previous year

at Paris, in inducing the withdrawal of Dr. Liouville's Bill for compulsory vaccination and re-vaccination. This evening, I shall confine myself to a brief statement of the aims and objects of this Association and of our monthly conferences. The grounds of our contention are, we think, very strong; but I hope the chairman will not consider that in stating them I import passion into the case. Perhaps I cannot do better than refer to the Articles of our Association. One of them runs thus:—"In times when the laws of health were imperfectly understood, the fanciful discovery was made that by poisoning the blood with the virus of small-pox or cow-pox, a fatal attack of small-pox might be escaped. While many kindred superstitions in medical practice have been discredited and forgotten, vaccination, because it was endowed by the State, has survived, and has entered into legislation, and is enforced with fines and imprisonment. It is in vain for nonconformists to plead that they do not believe that vaccination has any power to prevent or mitigate small-pox. They are told they may believe what they like, but that vaccinated they must be, for the benefit of the rite is settled beyond dispute." Now, it is to attack what we believe to be this mischievous superstition (and we may as well say so), that this Association has been formed. To make our attack effective, we invite the fullest possible discussion of the sides of this many-sided question. Thus, at some of our conferences we have had the statistical, at others the political, the historical, the medical, and the social sides of compulsory vaccination taken up. We have invited medical officers of health, eminent physicians, directors of small-pox hospitals, members of Boards of Guardians, magistrates, and all who are concerned in maintaining the practice of vaccination, or in the administration of the law by which it is enforced; and we believe that by this full discussion the end toward which our efforts are directed—the overthrow of compulsory vaccination—will the sooner be obtained. We look upon enforced vaccination as an anomaly in our social condition, altogether unjustified by any circumstances connected with it. Because a certain fraction of the community, say one in 2,500, is liable to the small-pox, we say it is illogical and unreasonable to attack with cow-pox the 2,499 who are not liable. There are numberless ailments to which human flesh is heir; for the mitigation or prevention of these ailments there are many thousands of prescriptions in use among the medical faculty; but there is only one ailment, and that a zymotic of the fifth magnitude, of which the State takes special cognisance, and there is only one prescription (and many of us believe it is worse than the disease which it is designed to prevent) which the State enforces with the strong arm of the law, or shall I say at the point of the bayonet. We maintain that this compulsion is not only unreasonable, but wholly indefensible. I must admit that when vaccination was first introduced, it was received with a considerable amount of favour, and it has been assumed, because of this favour, that Jenner had adduced scientific proof that it was all he represented it to be, namely, a protection against small-pox. The acclamation with which Jenner's discovery was hailed was not due to its merits. There had been no scientific inquiry by Jenner or his contemporaries. There had been no time for examination. Jenner obtained his reward from Parliament six years after he announced his discovery. Vaccination came into vogue because it was a substitute for the worse scourge — small-pox inoculation. There is abundant testimony that at the end of the last century inoculation was considered a most serious affliction, and relief from it was welcomed with fervour. The speeches in the House of Commons at the time of Jenner's award fully confirm this assertion. I have said that Jenner's prescription was received with favour by the medical profession, and by the public influenced by that profession. In the House of Commons, in 1802, Mr. Addington, the Chancellor of the Exchequer, said: "Vaccination is the greatest discovery ever made by any human being for the benefit of society since the world began;" and other speakers exhausted eulogy in like strains. It is not, therefore, surprising that attempts should have been made to extend vaccination under compulsory legislation; but it is instructive in these days, when compulsory laws are passed with light hearts, to remark what were the opinions of eminent statesmen at a period when our liberties, achieved at a great cost, were not carelessly surrendered. Mr. Canning made this reply in the House of Commons in the year 1808:—"Although I consider the discovery of vaccination to be of the very greatest importance, yet I cannot imagine any circumstances whatever that would induce me to follow up the most favourable report of its infallibility with any measure for its compulsory infliction." Forty years later, a no less eminent statesman, the late Sir Robert Peel, referring to another attempt made to obtain compulsory legislation, said: "To make vaccination compulsory, as in some despotic countries, would be so opposed to the habits of the British people, and to the freedom of opinion wherein they rightly glory, that I could never be a party to such compulsion." But what these enlightened men refrained from doing, I am sorry to say that men of lesser note have dared to do; and for twenty-nine years this country has been suffering under the infliction of compulsory vaccination. I use the word "infliction" advisedly, because I believe that millions of our countrymen have been coerced into the adoption of this medical prescription, believing it to be wholly injurious, and without any redeeming virtue; and not only so, but thousands of honest, conscientious and upright men have been treated as criminals for no other offence than defending their children from what they believe to be a baneful operation. We affirm this is a state of things which the majority of Englishmen can only look upon with feelings of indignation and shame; and the object of this Society is to wipe this national reproach from our boasted civilisation. This coercion has been justified, as all coercion has been justified from age to age, by the plea that it is for the good of society and the welfare of the State; but we deny that the welfare of the State can be secured by the enforcement of either medical or religious dogmas. Further, we maintain that if even some advantage could be secured by the

despotic exercise of power, it would be dearly purchased by rights that are outraged and the liberties that are destroyed—the rights of conscience, and the liberty of the parent to decide what is best for the well-being of his child. Our case has often been thus briefly put, but never answered. If vaccination protects, let the protected rejoice in the immunity which they have secured by the rite, but do not let them force their rite upon those who not only have no faith in it, but who believe it to be most injurious. If vaccination does not protect, then compulsion is wholly unjustifiable. But our contention is maintained upon other grounds, which we affirm are scientific and irrefutable. Mr. Dudgeon, of Quorn, and Dr. Southwood Smith, published facts thirty years ago to show that sanitation was sufficient to abolish all zymotic diseases, and, therefore, vaccination was wholly unnecessary. Dr. Carpenter, I know, by the letter which Dr. Clark has read, maintains an opposite opinion, but this opinion of Mr. Dudgeon's is a reasonable one, and it is supported by nearly all the leading sanitarians of our time, and by many able physicians. Dr. Lyon Playfair, a man of high reputation, says, "No epidemic can withstand thorough cleanliness." Is it not remarkable that at the recent Health Congress at Brighton not one word was said by any of the speakers in defence of vaccination? and Mr. Edwin Chadwick, one of the oldest sanitarians in the country, after describing the condition under which small-pox and typhus occur, said, "The entire removal of such conditions by complete sanitation and by improved dwellings is the effectual preventive of diseases of those species, and of ordinary, as well as extraordinary, epidemic visitations." And I think the Local Government Board is almost, if not quite, converted to the same doctrine. The report for the year 1881, published in the *Times*, on the progress of sanitary work in England, says that the seven zymotic diseases are most influenced by sanitary improvement, and most amenable to control by sanitary authorities; and at the Health Congress before referred to in Brighton, the President, Dr. Richardson, in his admirable inaugural address, published in *Fraser*, which I would advise you all to read, said, "Pure blood and a healthy life will banish all disease." But under this compulsory vaccination law, pure blood is an impossibility. It is, in fact, a penal offence. Our reasonable demand is, to secure liberty to have pure blood. We maintain that it is indefensible for any Government to insist upon diseasing the blood of the nation; and we have the high authority of Sir James Paget, who says, in his lectures on inflammation, that "vaccine virus produces a permanent morbid condition of the blood." Let it be understood that in this contention we have no war with the medical profession. Some of our ablest allies are professors of hygiene and medicine in the universities of the Continent, of America, and Canada, and they are our most earnest supporters at home. There are medical men on this platform who have been "boycotted" because they have refused to vaccinate; but neither "boycotting," nor loss of prestige, nor of place, nor popularity, nor emoluments, will cause them to swerve one iota from the truth they maintain on this matter. But while saying this, we also give credit to those gentlemen like Dr. Carpenter for the same honest intentions, and the same desire to serve the public, as we claim for ourselves, but we contend that Dr. Carpenter is labouring under an illusion. I am sure, however, that every member of this Society will give him an attentive, candid, and considerate hearing.

Dr. CARPENTER.—When I received the courteous invitation to come here and give an address, which might enable me to express the convictions to which I was led fifty years ago, and from which I have never seen any occasion to swerve, I thought it better to choose some definite point for discussion. The recent researches of M. Pasteur have shed a great deal of new and interesting light upon the question of vaccination. I have also had the opportunity of perusing what I believe is a unique copy of a pamphlet by Mr. Badcock, who, in 1845, asserted that he had produced the vaccine eruption not only on one cow, but on several cows, by inoculation with small-pox virus. Thus Pasteur and Badcock together confirmed the impression originally suggested by Jenner, that cow-pox is a modified small-pox—"modified by cultivation," as M. Pasteur would say, in another animal—and corresponding exactly with the remarkable fact, which M. Pasteur has worked out, that a disease which is just as fatal on the Continent to sheep and cattle as small-pox has been in this country, the *charbon* or *pustule maligne*, is preventible by inoculation with a virus modified by "cultivation" and certain chemical means in other animals. Now, I do not wish to bring forward this question to-night, nor the question of vaccination from heifers. Upon that question I have expressed a strong opinion, having come to the conclusion that heifer vaccination is a great boon. By heifer-vaccination, I mean vaccination continuously from the original cow-stock, not passing through the human body at all; not what is called retro-vaccination—the inoculating of heifers from the human subject; for that, I believe, is of no good at all. I mean the use of lymph derived by continuous transmission from the cow-stock. I regard that as a great boon, because it would at once sweep away all the objections (the cogency of which I fully admit) to the introduction of human disease into those whom we vaccinate. Leaving these details, which I have discussed in the *Nineteenth Century*, I take as my text the notice of motion which your president (Mr. P. A. Taylor) has given in Parliament, namely, that the epidemic of small-pox in London, in 1871, 1881, shows the utter incapacity of vaccination to deal with the disease. My object is to give you the reasons for the contrary—for the maintenance of the Compulsory Vaccination Acts, and for bringing them into a more stringent, complete, and thorough operation. With regard to the general question of compulsion, I do not want to discuss it all, further than to make one observation. Latterly, in this country we have gone in for Compulsory Education; and I believe nobody doubts, or scarcely anybody, the desirableness of compulsion in that matter. And why? Because we do not think that a parent should be allowed to choose ignorance for his child. We think that the bringing up a child ignorant, barbarous, brutal,

concerns the public generally, and not merely the child himself. In the same way the State says, "Vaccination is not a question between parent and child, it is a question between the child and the public; because the public is just as much liable to be injured by a child becoming a focus of small-pox, as it is by a child being brutal and ignorant." I could give plenty of instances that have been traced out of small-pox originating and being diffused from the unvaccinated. A wake is held on a dead body at Lambeth, for instance, or Pimlico, and half-a-dozen people are taken with small-pox by attending the wake. It is, therefore, not a question of the welfare of the individual, but a question of the welfare of the public; and I think it is a perfectly arguable proposition that, if vaccination can be proved, I won't say an absolute preventive (nobody that I know says so nowadays), but to have very greatly diminished the risk of small-pox, then I say the public has some interest in the welfare of every child, and has a right to take this matter into its own hands.

Now, sir, I have written a long paper; but I believe it will be better for me to deliver the substance of it *extempore*. Let us begin with a glance backward at the history of small-pox in relation to vaccination. I think that those who stand up at the present time to say that only a certain small proportion of the population at the present time is liable to small-pox, are bound to acquaint themselves with medical history. No medical writer that I know of in the last two centuries had the smallest doubt whatever, that everybody born into this world had just as much liability to small-pox as to measles, or whooping-cough, or scarlatina. Those diseases were put upon one level; they were grouped by themselves in every medical classification. They belong to the order of Exanthemata, the peculiarity of which is that everybody is liable to have these diseases once in life, and occasionally twice. Now, what are the facts of this case? Why, that there was a constant terror of small-pox in the times to which I go back. There is this peculiarity about London and its records of small-pox. Everybody knows that there were bills of mortality in London, furnished by the parish clerks, collected together, and published weekly. There was a great deal of mistake about the various diseases. If you try to ascertain from the bills of mortality what diseases were prevalent at the middle of last century, for instance, you would have great difficulty, according to the modern conceptions of disease, in ascertaining what those diseases were. Scarlatina is not named; and yet, at the present time, scarlatina is among the most fatal of diseases. Twenty thousand persons not unfrequently die of that disease in a year. Small-pox, however, was universally known and recognised. There was no disease about which there could be such entire absence of any mistake whatever. It is remarkable that even the great Sydenham confounded scarlatina and measles; and I believe the reason may have been that there was in his time a form of those diseases which could be mistaken one for the other; for I remember when there was an epidemic in the East of London which combined these diseases in a most curious way: but about small-pox there could not be any mistake. I have put on the wall before you the record of the death-rate from small-pox, compared with the general death-rate of the metropolis:—

DEATH-RATE OF LONDON PER MILLION LIVING.

YEARS.	GENERAL.	SMALL-POX.
1660-79 ...	80,000 ...	4,170
1728-57 ...	52,000 ...	4,260
1771-80 ...	50,000 ...	5,020
1801-10 ...	28,000 ...	2,040
1831-35 ...	32,000 ...	830
1841-50 ...	24,800 ...	400
1851-60 ...	23,700 ...	278
1861-70 ...	24,400 ...	276

Now, I have been accused of romancing a little about the former prevalence of small-pox. The first five lines of this table, Sir, are taken from the carefully-prepared statistics of Dr. Farr,* who, beyond all question, is the ablest medical statistician of his time, or of any time; and to say that Dr. Farr was influenced by any feeling in this matter, is to accuse one of the truest men I have ever known of deliberate falsification. Now, what were the materials for these statistics? The materials, up to the commencement of the present century, were defective, inasmuch as no one could say precisely what was the population of London. There was no census; but Dr. Farr went on the principle of comparing all the best estimates he could obtain; and the entries in that table, down to 1831-1835, are made up from the best data that Dr. Farr could find. The first regular census was taken in 1801, and from that time we know accurately the population, and the deaths from small-pox within the limits of the Bills of Mortality. You must remember that the Bills of Mortality only refer to a portion of London; and at the beginning of the present century London had far outgrown the limits covered by the Bills; and, therefore, the best way to compare the small-pox death-rates is to reduce them all to one common standard, as I have done. We begin with the period, 1660 and 1679. The general death-rate of London was, at that time, 8 per cent.—80 in a thousand—a most fearful death-rate; but, then, remember that that included the year of the Great Plague; yet, notwithstanding the Plague, the average small-pox death-rate for those twenty years was 4,170. Small-pox then pervaded all classes of society. The Duke of Gloucester died while the rejoicings for the Restoration of 1660 were going on. Anybody who reads "Pepys' Diary" will find frequent references to the prevalence of small-pox in the highest places of the land. Every one who knows who Evelyn was, knows that he was not a man to be

* I have been accused by Dr. Pearce of having *selected* these periods with a purpose, and of passing over intermediate periods of smaller mortality. I give the table *exactly as I found it* on p. lv. of Mr. Simon's well-known Blue-book (1857), omitting only the first period 1629-35, as short and obviously exceptional, the long periods which succeed it giving a death-rate which accords closely with the estimates formed by the medical historians of the time. It has been asserted that these statistics *must* be wrong, because the *general* death-rate given in them far exceeds any possible birth-rate, and that thus London would have been depopulated. But it is perfectly well known to statisticians, that the maintenance of the population of the Metropolis during a large part of the last century, depended upon immigration from the country; its own death-rate exceeding its birth-rate.

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living under bad sanitary conditions; but in his diary he wrote, "in bitterness of sorrow and reluctancy of a tender parent," of the death of his daughter by small-pox. There was the case of Queen Mary, the wife of William III. Burnet, the historian, says, "The small-pox has broken out afresh in London; we had the greatest apprehension for the Queen, because she never had it." The Queen died of it. Does anybody now entertain any apprehension for the Queen or any of the Royal Family? They never had the small-pox, not one of them. I happen to know they were all re-vaccinated some years ago; I remember hearing of it from my friend Sir James Clark, who caused them all to be re-vaccinated. Now, does anybody suppose that if small-pox were prevalent at Pimlico, near the Palace, the Queen would hesitate to go to the Palace for fear of catching it? I am perfectly certain it would not prevent her, if she felt called upon. I turned up a passage in Pepys that I shall read in his own words, because I have been accused of romancing. He says, "And among other things, it hardly ever was remembered such a season for the small-pox as these last two months have been. People have been seen all up and down the streets newly come out after the small-pox." And again, in the winter of 1694-5, we read in "Burnet's History" that the small-pox was raging about London. Some thousands died of it. Now, remembering what London was at that time—about one-tenth of what it is now—think of some thousands dying of it, and giving great apprehension with regard to the Queen, "for she never had it." And then, in January, 1695, after the Queen had died of it, Pepys reports 500 deaths from small-pox *more than in the preceding week*. These were not vague stories; these were reports from the Bills of Mortality—500 more in one week than in the preceding week! Think what that must have been; and here we were, all last year, reckoning the deaths in this population of nearly four millions by tens—not by hundreds, but by tens. To the best of my recollection, there was no one week in which 100 deaths occurred. Now, the next period taken by Dr. Farr is from 1728 to 1757. There you see the general death-rate had come down to 52,000 per million, but the small-pox death-rate had increased. I think it very likely that the increase was due to what shows itself much more in the next period, in which you see it rose to 5,020. I believe that that was the result of inoculation; and I say so upon the authority of some of the best medical writers of that period. At the end of the century, Dr. Heberden, looking back over the century, says, "I think from the best evidence we can collect that inoculation increased the mortality of London by about one-fourth." Now that exactly corresponds with Dr. Farr's table. Adding a quarter to 4,000 (in round numbers) gives 5,000. It is curious, however, that, notwithstanding inoculation increased the general mortality, it diminished very much indeed the individual liability. The two things are not in the least degree incompatible. In the country, small-pox was introduced into localities where it had never been before, and where it never would have been. There can be no doubt at all that inoculation did great mischief in that way. Small-pox being always prevalent in London, and London then being not anything like as large as it is now, people would always be in the way of catching it; and therefore the mischief it did by inflicting small-pox upon people who otherwise would have escaped it was comparatively small. But in the country, I believe, there was no doubt that inoculation increased considerably the general mortality. We have not, however, the same information with regard to the mortality of England that we have of London. I therefore limit myself to London; and it is pretty clear that inoculation was answerable for about one-fourth of the average of 5,000 deaths. Therefore I propose to knock off that one-fourth altogether—to put it out of the question, as it were; and say that during the 140 years, from 1660 to 1800, we may take what we may call the natural rate of small-pox as about 4,000 per million—that is, out of one million persons, 4,000 died annually, taking the average of long periods. And we have just the same evidence in the eighteenth century of persons of all ranks being attacked, as in the seventeenth. There has been published a catalogue of noble and royal personages who died of small-pox in the eighteenth century. Take Louis XV. in 1774; take the Dauphin of France in the early part of the century. And it is not only their deaths, but the apprehension that was shown of the small-pox by the people about them, that marks what small-pox was in those days. Everybody dreaded catching small-pox. When the Dauphin was dying, there was not a single person who would sit near him in his last moments, or near his body after he died, but one of his mistresses, La Vallière; and when Louis XV. died there was just the same terror, Madame Du Barry alone (if I remember right) staying with him. His body was hurried, huddled into a coffin; and the priests who were sent to pray by the side of his coffin in the chapel, were said to be "condemned" to perform this last office for him, on account of the apprehension of their taking small-pox. He died of a particularly malignant type of small-pox; and I want to impress this fact upon you, that in the last century there was, every now and then, a form of small-pox which was terrible—as bad as the worst forms of what we used to call putrid fever. I will give you an illustration of it from Horace Walpole (and this, again, will show you that small-pox attacked people of all ranks), written in 1750. Walpole says: "Lord Dalkeith is dead of small-pox in three days,"—now, that at once marks the severity of the type;—"it is so dreadfully fatal in his family, that, besides several uncles and aunts, his eldest boy died of it last year; and his only brother, who was ill but two days, putrefied so fast that his limbs fell off as they lifted his body into the coffin." I bring this forward to show you what different degrees there are in small-pox; a fact which I shall again bring before you prominently with regard to the recent epidemic.

I now come to the present century, in the beginning of which Jenner's discovery was announced, and in the course of a few years took strong hold on the public, in spite of very great opposition. Any one conversant with the history

of the early part of this century, knows that vaccination was far more strongly objected to then than it is now. Any one who looks at the caricatures, for instance, of horns sprouting out of the heads of people, who knows how fashionable, popular clergymen preached against it, knows perfectly well that it had to fight its way; and I am sure it could not have fought its way as it did, if it had not been that the public soon came to appreciate its value. And what was the result? Why, that the mortality in the first ten years was halved. I say "halved," because, for the reasons I gave just now, I knock off 1,000. I say, the previous mortality, putting aside inoculation, was 4,000 per million. Thus, according to Dr. Farr's statistics in the first ten years of the century the mortality was halved; and this before vaccination came to be by any means universal. Dr. Farr's next period belongs to 1831-35. Now, that is a period I know very well, because it is when I was in the profession and practising in Bristol. So firm was the conviction of medical men, that we paid money out of our own pockets to propagate vaccination. We used to give shillings and half-crowns to poor women to bring their babies. I do not want to boast of it; I simply mention it as a fact that showed our faith. When I took part in propagating a new stock of vaccine, which my old master had brought from Berkeley, medical men who remembered the old Jennerian vaccine vesicle, had said at that time, "This vaccination is not anything like as effective as it was in our earlier days; it is dying out." We learn the *rationale* of all this now; we are perfectly satisfied of it. M. Pasteur has shown what "humanising" will do. I mention one small fact, communicated to me by Dr. Martin, who has been the great advocate in the United States of animal vaccination. He told me last summer, "If you try retro-vaccination; if you vaccinate a calf from the human subject, and then try to carry that through a succession of calves, you cannot do it; it dies out in three removes." This shows how completely the genuine vaccinia of the cow has died out by what M. Pasteur has taught us to call "cultivation" in the human subject. Then, I say, there is good vaccination and bad vaccination, good lymph and bad lymph. We believed then that the good lymph had been altered, and we brought in a new lot of original vaccinia from the cow. Several of us clubbed together to pay the expenses out of our own pockets, for establishing an institution for the general diffusion of this vaccinia, where one or other of us devoted his time for hours every day for a year; and that we did. The sum I then contributed was a sum of some importance to me in those early days of my professional career. That showed our honest conviction. Let me mention another fact which I published in the *Times* last year—that during my attendance on an Eye Institution for eight years, I saw at least 100 cases of blindness from small-pox. The inquiry was carefully made in every instance, "Has that child been vaccinated?" "No, sir." "How did it get the small-pox?" "Catched it natural, sir." That was the regular answer, which meant that the child had not been inoculated. Out of the 100 cases, at least, of blindness from small-pox, which I saw during my early professional career in Bristol, in no case whatever had the child been vaccinated. I have taken some pains to get further information on this point; and I have found that in the Blind Institution of St. George's-in-the-Fields, which is the oldest institution in London, *two-thirds* of the patients that applied for admission in the middle of last century were blinded by small-pox. Now, the other day, I wrote to the present secretary of the Institution, and asked him what proportion of cases there were at present blinded by small-pox; and he said about *one-twentieth*. That seems to me a rather significant fact. I can speak from my own recollection of the years 1831 to 1835, that there was then no objection to vaccination, only people did not care about taking the trouble. Little objections there might be, such as these: "Oh, my child had sore ears after vaccination, so I did not have this next child vaccinated." That was the common answer given when we asked why the poor child, blinded by small-pox, had not been vaccinated. Now, sore ears, as every medical man knows who practises among the lower classes, is one of the commonest disorders among children, and cannot be at all fairly attributed to vaccination. I say at that period vaccination was general. It is impossible to say how general, but it was general; and the London mortality shows a reduction during the years 1831–35 to 830 per million. In 1840 the Legislature provided the means of vaccination, and made it compulsory upon certain medical officers to vaccinate anybody who asked to be vaccinated. That put it in the way of the people; and what was the result? Why, that between 1841 and 1850, the small-pox mortality of London was reduced to less than one-half what it had been between 1831 and 1835. Then, sir, came the period of compulsory vaccination from 1853. I have purposely taken the decades as they are given in the Registrar-General's Reports. I object altogether to selections of epidemic years. These selections do not give the years of freedom; they do not say that between those epidemic years small-pox dropped to almost nothing. I object, sir, to selected statistics, I have taken the statistics of decades; and in the decade 1851 to 1860, the death-rate dropped down from 400 to 278. I say that was the result of compulsory vaccination. In the following decade (1871–80) the rate per million dropped down a little more —to 276. The coincidence of those figures is so remarkable, that I say *that the last seventeen of* those twenty years give you a fair statement of what compulsory vaccination did in reducing the London death-rate.*

I now come to the greatly-increased death-rate (448† per million) of the decade 1871-80; as to which my argument is, that it is altogether exceptional. And why? Because in the year 1871 a peculiar type of small-pox came

* The average small-pox death rate for *all England* during the twelve years 1838-52 and 1847-53 (the causes of death not having been abstracted by the Registrar-General in the intervening years) was 420 per million; while for the seventeen years, 1854-70, subsequent to the compulsory enforcement of vaccination, it fell to 174. In Scotland, the average number of deaths from small-pox during the ten years 1855-1864, was 1,054; in the six years that followed the enforcement of compulsory vaccination, the average fell to 144, or scarcely more than *one seventh*.

† Dr. C. Pearce, in a letter to the *Echo*, calculates this rate at 450; I think he will find that mine is the correct rate.

over to us from France, where there is strong reason to believe it had been engendered by the horrible conditions which prevailed during the Franco-German War among the wretched troops that were then got together. There were outbreaks of small-pox among them; and just the same thing followed that happened here in our jails and military hospitals in old times. Where men with a mild type of disease were crowded together, a most malignant type was developed. That malignant type of small-pox was brought from France to this country in the beginning of 1870 or 1871, and it is still the characteristic of the epidemic. It is only those conversant with medical history, who know that the same disease may have quite different characters at different times. You must not speak of small-pox as if it were always one disease. Why, it is on indisputable record that in many cases of inoculation under favourable circumstances, the deaths were no more than two or three in a thousand; and during the earlier part of the present century (certainly within my own recollection) we never heard of a case of this "malignant" form of small-pox. We used to think "confluent" small-pox the worst. The worst I ever saw was a case of confluent small-pox, and the poor child died of it. It was unvaccinated, living in a very healthy lodge in a park near Bristol. But what is really the worst form of small-pox? Why, the form of which I read from Horace Walpole, in Lord Dalkeith's family. The form is now perfectly well known to the medical superintendents of our small-pox hospitals; and I could give you figures to show that a considerable number of deaths occur from this most severe form of the disease (140 in one, and 108 in another, of the metropolitan hospitals during last year). The average duration of the stage of this form of small-pox is only four days. It was severe not in London only, but in various countries of Europe. It was worse in America. It was so bad that it has been suggested that the Black Death of the middle ages, which carried off one-third of the population, might have been this severe small-pox. The symptoms are much alike —blackness over the body, from the escape of the colouring matter of the poisoned blood into the skin; or if the patient survives long enough for the eruption to come out, the blood passes into the pustules; or, again, hæmorrhage takes place from the bowels and the kidneys, and the patient sinks in the course of a few days. As a general rule, *every* one thus attacked *dies*; recovery being the *very rare* exception. Now, it is this "malignant" small-pox which runs up the mortality of unvaccinated patients. If you look at the tables that have been published of the epidemic of 1871 and of succeeding years in London, you will see that the mortality of unvaccinated patients has been from 40 to 45 per cent.—an unheard-of mortality in this century, though I dare say some epidemics last century would show a similar mortality. The mortality among the vaccinated tells a very different story. The returns of the epidemic of last year (as far as I have yet seen them) prove that there was not a single death from malignant small-pox among those who showed "good" marks of vaccination. Several, no doubt, had been vaccinated; but there was scarcely a single case in which there was evidence of *effective* vaccination, among the hundreds of poor creatures who died of this terrible form of small-pox. When you do not separate the vaccinated from the unvaccinated, you cannot distinguish what is due to vaccination. The Metropolitan Hospital-returns show this most significant fact,—that the number of *cases* of small-pox in children *under* ten years of age who possessed vaccination marks, was far less than the number of cases *above* ten; and they further show scarcely a single *death* of any child under ten years of age among the *well* vaccinated, and very few even among those that had been "imperfectly" vaccinated. On the other hand, of the unvaccinated, the *cases* among children formed a large majority, and the *deaths* a far greater proportion; thus speaking very strongly of the protective power of vaccination during the period of childhood, in which the fatalities were mostly confined to the unvaccinated. Such are the general facts of this epidemic. (See appended Table, p. 229.)

As one accustomed to study the histories of Epidemics, I have no hesitation whatever in saying that the period of eleven years, 1871–1881, is an altogether *exceptional* one; the small-pox of this period having a type which has never before been prevalent in the experience of living men.

Now, sir, I come to the distribution of this epidemic. It was severe in 1871 over the whole country. "In Scotland it was particularly severe, for the Compulsory Vaccination Act had not there been long in operation, and there was a very large unvaccinated residuum in the large towns, especially Glasgow. This epidemic of 1871, which died out in England, hung over Scotland for three or four years." * But what has been the case since? The Scottish people were so impressed during that epidemic with the value of vaccination, that compulsory vaccination has since met with no opposition. The Medical Registrar states in his last report that only one person in the whole of Scotland in the year 1880 objected to vaccination. I have carefully gone through the figures of the Scottish report, and it is clear that vaccination, in proportion to the number of births, has been carried on more effectively in Scotland than in most parts of England—certainly much more effectively than in London. And what has been the result? Mr. Young, in papers issued by this Society, does not tell anything about Scotland, but merely about London. He does not tell us that in Scotland small-pox has been almost extinct for some years past. How

* I beg to call particular attention to the passage marked between inverted commas, which stands *precisely as taken down by the Society's reporter*, because I have been charged by Dr. C. Pearce with attempting to "conceal" this fact. The total number of deaths from small-pox in Scotland, in the four years of this malignant epidemic, was 6,360, or at the rate of 1,565 per annum; while the total number of deaths in four separate epidemic years of ordinary small-pox in the decade preceding the introduction of compulsory vaccination, was 6,188, or at the rate of 1,537,—a rate slightly less numerically, but considerably higher in proportion to population. The *general average* of small-pox deaths in the ten years preceding the introduction of compulsory vaccination having been (as already stated) 1,054, the general average of deaths for the whole seventeen years of compulsory vaccination, *including the four years' epidemic*, has been only 430,—thus showing a numerical reduction of just 60 per cent.; and this reduction would be greater, *pro rata*, if the increased population of the later period were taken into the accounts.

many deaths do you think there were in the whole of Scotland last year—a country which has a population nearly that of London, namely, 3,700,000? There have not been a dozen deaths in Scotland a year for the last four years! Is not that a significant fact? Taking it generally, the like has been true for some years past in our large English towns. In nineteen great towns, the aggregate population of which is about the same as that of London, the mortality for the last three or four years (excepting 1881) has been little more than that of Scotland; and anyone who runs his eye over the Registrar-General's report will see that over large areas of Great Britain there is a perfect blank against small-pox for years past. I think myself justified, therefore, in maintaining that London is in an exceptional position. We all know that the propaganda of this Society has had very considerable effect in London. There are in some districts 8 per cent., and in one or two 10 per cent., and in others less, that are never vaccinated. They commonly escape by moving into other districts. There is a large migratory population who go out of one district into another. There is no central authority in London. In Leeds, Birmingham, Liverpool, and Manchester, there is one head vaccination-officer, and he keeps his eye on every quarter, and there is no escaping. Then I know, as a fact, that there are persons who will not register their children's births because of the vaccination that would be inflicted on them. There is therefore no doubt that there is a large unvaccinated residuum in London, and I maintain that that unvaccinated residuum is the cause of this continually-smouldering fire of small-pox in London. At times, small-pox has almost died out in London. In 1873 and 1874 there were not 150 cases in London. But the disease lighted up again. And why? Because here was a continual fresh piling-up of fuel on the smouldering fire, in the shape of unvaccinated children. That is my interpretation, and I think I am justified to a very considerable degree by the facts upon which I have laid stress. But I know I shall be met by this argument, that there are towns—Leicester, for instance, and still more, Keighley, and the Dewsbury district—where the anti-vaccination propaganda has been very active, and yet there has been no small-pox. Why not? Simply because small-pox has not established itself in the surrounding area. Even my opponents must admit that the absence of *any* deaths in these towns for several years past, shows that small-pox has not been effectively brought into them since the general epidemic died out. If such a focus of small-pox as there is in Hackney were now introduced into Leicester, all experience shows that it would spread. But fire does not burn without being kindled. I will give you a remarkable illustration of this from another disease, mentioned to me the other day by my friend, Dr. Playfair, who, having married an American lady, crosses the Atlantic every year to visit her friends. He was staying at Nahant, on the coast of New England, a watering-place which has a great repute for its salubrity, where many wealthy people have houses of their own. It is situated on a long and low peninsula, with no drainage. The houses have cesspools, and yet, as the place is very healthy, it might be argued that it is salubrious to live over cesspools, just as your Society says it is more salubrious not to be vaccinated than to be vaccinated. Some sanitary reformers, such as my friend, Mr. Chadwick, firmly believe that cesspools breed typhoid fever. My late friend, Dr. William Budd, demonstrated to the conviction of most medical men (I believe Dr. Murchison was the exception among those who studied Dr. Budd's proofs) that typhoid fever is a disease that requires a disease-germ; and the case of Nahant affords a most remarkable exemplification of it. There were people who had been living in good houses over cesspools for twenty, thirty, or forty years, and no typhoid fever occurred; but two people came from New York, who were attacked with typhoid fever. What was the result? The fever immediately spread throughout Nahant. It broke out in the best houses; and my friend Dr. Playfair and his wife took fright, for it appeared in the house of Mrs. Playfair's father, and they immediately took their departure.

Let me finish with a singular case, illustrative of the argument I have been developing this evening. San Francisco is a large city, with a total population of about 230,000, and a Chinese quarter inhabited by about 20,000, adult males mostly. This Chinese quarter is a most squalid place, where all pig together in filth and bestiality. There is no compulsory vaccination in any part of the United States, as I learned from my friends last summer. When an outbreak of small-pox takes place, then the Municipalities require the people to be vaccinated, to stop the epidemic. About five years ago, this town having been visited with a very severe epidemic of small-pox (doubtless originally imported from Europe), the Board of Education determined that every child then in the schools should be vaccinated, and that no child should thereafter be admitted without a vaccination certificate. Thirty-four thousand children were then vaccinated, and about 50,000 since, mostly with the heifer lymph. A smouldering fire of small-pox has been kept up among the Chinese, on whom vaccination could not be enforced; but there was no general renewal of small-pox until the autumn of 1880. What happened then? In November of that year 147 cases occurred in the best part of the city, generally in respectable houses, and 140 more in December. I should tell you that the general death-rate of the city was singularly low. Including even the Chinese, it was only about 18, and, excluding the Chinese, only 17 per thousand; whereas in London it is generally from 23 to 25. Now, how did the Chinese come to affect the general population? Why, in this way. These Chinese are laundrymen; they go about into the best houses; they are artisans of various orders. They manufacture articles and send them out. They have been known to be making slippers, for instance, in a room where there was a body lying dead of small-pox; so that the Chinese colony furnished a focus of small-pox.

Mr. A. Emery.—I rise to a point of order. The learned gentleman said he would confine his observations to London. What is the use of

going to San Francisco, where we cannot test his statements?

The CHAIRMAN.—I have two remarks to make. First, it is plain that the statement of Dr. Carpenter bears on the general question that the mere salubrity of a town does not of itself prevent small-pox. The second is, it is true that Dr. Carpenter has exceeded his time, but pray remember that he has come here, at great cost to himself, into the lion's den, and surely you are not going to annoy him if he occupies a few extra minutes.

Dr. CARPENTER.—I fully admit that the reduction of the general death-rate, as indicating the improved sanitary condition of London, has its bearing on the position. I do not wish to exclude that consideration; but I say that no sanitation will exclude small-pox, and San Francisco is a case in point. Sanitation did not exclude small-pox from the houses of kings, queens, and nobles in the last century. I shall be met by the assertion that those houses were very unhealthy; but San Francisco is the most healthy large town of which I know; and there a focus of small-pox is kept up by the Chinese, who convey it into the most healthy habitations. The demand for vaccination was immediately very great. The panic amongst the "upper crust" was such, that all who had not been vaccinated, rushed to be vaccinated. Of the 80,000 vaccinated children, only ten, or twelve *took* small-pox (it is not stated that any of them *died*); and not a single *case* occurred among those that had been vaccinated with the heifer lymph. This experience of San Francisco has made a very strong impression upon my mind; but I would not have detained the meeting with bringing it in, had I not felt it necessary as an answer to Mr. Tebb's remarks. I do not say that the time may not come when sanitation may be so perfect that all exanthematous diseases may be extinguished, but it has not as yet reached that mark of perfection. Look at the worst parts of London, look at the worst parts of Glasgow. There are places in Glasgow as bad as any in London, and yet small-pox has been practically stamped out in Glasgow. There were *two* deaths there last year, when there were 2,371 in London.

The CHAIRMAN.—In the position to which I have been summoned, the duties are purely regulative and judicial, and in fulfilling these duties I should be exceedingly glad to have presented to you a summary of the admirable address we have heard from Dr. Carpenter; but the time is so far spent, that I shall at once call upon the next speaker in reply to Dr. Carpenter, Mr. Enoch Robinson.

Mr. ENOCH ROBINSON. — Time being so precious, I hope you will take it as read that I, a general practitioner, rise with diffidence to reply to so eminent a man as Dr. Carpenter. There are two points in his address to which I shall direct your attention. The first is the assumption that the difference between the prevalence of small-pox in the provinces and in London—a difference we all admit—is owing to vaccination. I deny the truth of this assumption. The second point is the remedy, suggested by Dr. Carpenter as being needed in London in order to get rid of the continuous small-pox epidemic, namely, more efficient vaccination. I shall contend that this remedy does not rest upon a scientific basis. The sheet of statistics placed on the wall by Dr. Carpenter will serve my purpose very well in discussing the first point. In order to give vaccination the credit for the better condition of the provinces at the present time as compared with London, it is necessary for the vaccinator to assume that in the time of natural small-pox the condition of the provinces would not bear the same favourable comparison with London. Dr. Carpenter has acted more fairly to-night in the use he has made of the small-pox statistics of the last century than either he or other advocates of vaccination have done in the newspapers and periodicals. In his writings in the *Spectator* and the *Times*, in order to persuade people to adopt vaccination, he vividly described the disastrous effects of small-pox in past times as compared with the moderate effects of recent days, leaving the reader to suppose that if vaccination ceased in this country, we should of necessity return to the frightful conditions he described. But Dr. Carpenter's descriptions were of the small-pox inoculation period, and not of the period of natural small-pox, the latter period having terminated in 1730, when the inoculation practice began. To compare the present time with the inoculation period, with a view to frighten persons into the adoption of vaccination, is not logical, and is somewhat cruel, because, if vaccination were done away with to-morrow, we could not return to the inoculation period, with all its disastrous effects, for two reasons—first, small-pox inoculation is now a misdemeanour; and second, the common-sense of the people is sufficiently enlightened to prevent its re-introduction. The period upon which we should enter if vaccination were discontinued, and with which, in past times, the vaccination period should be compared in order to find out what the real effect of vaccination has been, is that of natural small-pox. In consequence of the two successive practices of animal disease inoculation (small-pox inoculation beginning in 1730, and vaccination beginning with the present century), the present generation has had no experience in this country of natural small-pox uninfluenced by animal disease inoculation. The statistics on the wall will suggest the great changes in the sanitary state of the country that took place from the middle of the seventeenth century to the beginning of the nineteenth century. Notice the very large general death-rate in the first period (1660-79), 80,000 per 1,000,000, and the great diminution in the next (1728-57), 52,000 per 1,000,000, whilst the small-pox mortality increased from 4,170 to 4,260. These striking results arose from definite causes. In the first period there was the Great Plague, accounting for the high general death-rate. The unsanitary state of London at that time must have been frightful. Green says:—"In six months (1665) 100,000 Londoners died of the plague in its crowded streets." Notice the word "crowded." But this mortality was, fortunately, from a sanitary point of view, followed by the Great Fire, the greatest act of purification, probably, that London ever had. Hence the fall in the general

death-rate. Why did not the small-pox mortality fall in an equal ratio in the second period? Because of the introduction in 1730 of the pernicious practice—small-pox inoculation. Dr. Carpenter's own figures, therefore, bring vividly before us the great increase in the small-pox mortality positively caused by inoculation, and in spite, even, of the great improvement in the general mortality. In allowing only one-fourth as the increase from the practice of inoculation, Dr. Carpenter has not allowed for the great decrease that would have taken place in small-pox mortality, coincidently with the decrease in the general mortality. Not only did inoculation *undo* the good influence of the improved sanitary condition, but it actually, as we see, raised the small-pox mortality from 4,170 to 4,260. But not only did inoculation produce this disastrous effect in London; in the provinces its fatal influence was still more strikingly manifested. In Barron's "Life of Jenner," I find the following:—"The numbers who died of small-pox in the *last* thirty years of eighteenth century (1770-1880) was 95 in 1,000, while in the *first* thirty years (1700-30) the proportion was only 70 in 1,000. Sir Gilbert Blane adds that this is, perhaps, more strongly exemplified in the *country* than in London, *since there were many parts of the country in which, previously to the practice of inoculation, small-pox was not known during periods of twenty, thirty, or even forty years; so that a great many passed through life without ever having been affected with it in any way;* whereas at present (1801) both from inoculation and from the free and extended intercourse between the most distant parts of the United Kingdom, an adult person who has not had small-pox is scarcely to be met with or *heard of*." So that, if we want to know what would be the state of the provinces as to small-pox prevalence and mortality, if we were to give up vaccination and return to a natural small-pox period, we must go back, not to the period of small-pox inoculation so vividly described by Dr. Carpenter, Mr. Ernest Hart, and Mr. Simon, but to the antecedent period, that of natural small-pox, when the provinces had periods of twenty, thirty, and forty years of entire freedom from small-pox; and when men might live long lives without coming into relation with the disease. We have not such periods of freedom now. If vaccination be such a beneficent influence as its advocates so persistently assert, why have we not at least as long periods of freedom from small-pox in the provinces now as were enjoyed by the people previous to 1730? Can it be because "the minimised form of small-pox, which vaccination is," to quote Simon's classical phrase, is, like small-pox inoculation, *diffusing*, it may be more slowly but more thoroughly, through the United Kingdom, the small-pox disease? At any rate, we ought not to be worse off now than in the first thirty years of the last century. Where are these long periods of freedom from small-pox gone to? We say, give us back the time of natural small-pox, free from any form of animal disease inoculation, and let us have the chance of fighting the disease with improved sanitary agencies of the present day. That we should be in a better condition than we are now is demonstrated by the experiments made in this direction in the face of the most powerful official opposition in the towns of Keighley and Leicester. Dr. Carpenter has admitted in his address that vaccination in these towns is grossly neglected. Why have we a nearer approach in Leicester and Keighley to the natural small-pox period, with its greater freedom from small-pox mortality, than in the other towns of the provinces? We say, give us back the period of natural small-pox by striking out the compulsory clauses of the Vaccination Acts. The absence of any basis of comparison within the memory of the present generation, between natural small-pox and small-pox intensified by vaccination, has done more to deceive the people than probably any other single condition. I now come to the second point in Dr. Carpenter's argument, namely, that increased efficiency in vaccination is the need of London, to bring it up to a level with the provinces. This question is to me of more importance than the one I have just dealt with. I am not specially qualified to deal with figures, but, as a general practitioner, I am extremely anxious to get at the scientific aspect of this vaccination question. Now, our position to-night is not one simply of destructive criticism. I should not stand upon this platform to-night to oppose Dr. Carpenter, if I had not as strong a faith in an agent other than vaccine lymph, as Dr. Carpenter has in vaccination. There is an agent which I maintain is more scientific in every respect than the cow-pock disease, which officialism at present so urgently thrusts upon the attention of the community. Dr. Carpenter, in his address, has referred to the degraded condition of the blood, to the changes in its colouring matter that attend the worst forms of small-pox; and, therefore, I may be excused if, in describing the agent in which I have confidence, I refer to minute details of a physiological character. When Dr. Carpenter tells us that the need of London is greater efficiency in vaccination, I have a right to suppose that he knows the nature of the agent and the method in which it works. If a man claims to be able to detect degrees of efficiency in the working of a machine, such a man must possess first a knowledge of its structure and the principles involved in its action. Do the vaccinators know what is the essential nature of vaccine lymph? Can they tell us how it performs its protective function in the body? If I ask Mr. Simon what is the essential nature of vaccine lymph, he will tell me that it is human small-pox modified by the skin textures of the cow; and if I turn to Dr. Cameron, M.P., and ask him, he will inform me that vaccine lymph is "*sui generis*," and must have no relationship whatever with human small-pox. And if I open two of the leading medical journals of last Saturday, I find in the *British Medical Journal* a letter from Mr. Fleming, I think President of the Royal College of Veterinary Surgeons, in which he denounces in decided terms the idea that true cow-pox can have any relationship with human small-pox. Whilst in the *Lancet*, there is a letter from a surgeon in India, who, at the time of writing, had inoculated three heifers with human small-pox, and had produced the vaccine vesicle. When M. Pasteur was in London last

year, Dr. Carpenter asked him as to the relationship of vaccine lymph to human small-pox; but Pasteur was too wide-awake to commit himself. He preferred to leave it an open question. Am I, therefore, not justified in saying that, as to its nature, vaccine lymph has not a scientific basis of positive knowledge upon which to rest its claim to the confidence of scientific men? I now come to the mode in which it acts upon the human body. As a general practitioner I have a right to demand from an eminent physiologist like Dr. Carpenter the minutest information upon this subject. There never was a time when physiological knowledge was advancing with such decisive steps as now. The great school of physiology which Professor Michael Foster has created at Cambridge, and the valuable works emanating therefrom, have brought us face to face with minuter conditions of animal life than have ever been made known to us before. Has this increased knowledge elucidated in the slightest degree the mode in which vaccine lymph works a protective change in the tissues of the human body? Sir Erasmus Wilson, in his great work on Skin Diseases, says, in 1863:—"For what length of time is the susceptibility destroyed?"—and—"At what period after contagion is the restoration of the organism so far effected that a second attack of contagious disease may take place?" "To both these questions the answer is, *we know not*," and he emphasises these words in italics. And if I turn to the *British Medical Journal* of Nov. 12, 1881, I find in an editorial article the following:—"At the same time, the labours of M. Pasteur and others do not appear to have brought us any nearer to an intelligible explanation of the prophylactic virtues of inoculation. The pathological theory, in the hands of M. Pasteur, lags almost as far behind the practice as it originally did in the hands of Jenner." Now, I am not acquainted with any later opinion as to the scientific position of vaccine lymph as a remedial agent, but I think I am justified in saying that it lacks absolutely a scientific basis of positive knowledge upon which to rest its claim to the confidence of scientific men. But, although there may be no positive knowledge, there have been several theories put forth by ardent believers in vaccination. Mr. Simon is an eminent man, and in 1857 published an elaborate history of small-pox and vaccination. One of his theories as to the action of the vaccine lymph is thus stated:—"Lymph of shorter descent has been more successful in disinfecting the body of that ingredient which constitutes its susceptibility to small-pox." To speak of vaccine lymph "disinfecting" the animal body of an ingredient, is so glaringly inconsistent with the ideas now prevalent in these days of antiseptic surgery, that I venture to say Mr. Simon would modify this opinion, as he has modified other opinions contained in his papers of 1857, if he had to revise them. Vaccine lymph is a phase in the life of one of the many forms of purulent matter. The areola said to be necessary to every "protective" vesicle is the beginning of common septic inflammation. So near is it to the stage of a rapid blood poison, that Mr. Simon thus writes of its nature:—"Especially as regards the quality of vaccine lymph, the careless or uneducated vaccinator is using a dangerous weapon. It is only during *part of the course* of a vaccine vesicle that its lymph is suitable for further vaccinations; for *after a given moment*, at which the contents of the vesicle possess their maximum of simple contagiousness, they tend more and more towards the quality of *common inflammatory products*, and matter *now taken* from the vesicle is no longer the simple agent of a specific infection, but both has less efficiency for its real purpose, and is specially able to produce *other undesired results*. A danger of a somewhat similar kind is that of taking lymph from vesicles which already have been accidentally ruptured, or where, from any other cause, local or constitutional, their specific fluid is likely to have been modified by common irritative processes. Still more critical changes occur in lymph when removed from the body, unless appropriate means be taken to preserve it, for, under the influence of air and moisture, it tends, like other dead organic matter, to putrid decomposition; and inoculation with it, when thus changing, can hardly be more useful, or less dangerous, than a casual scratch inflicted in the dissecting room." *

These opinions, if my own observation did not help me, justify me in saying that vaccine lymph is a phase in the life of one of the many forms of purulent matter; and to speak of it as Mr. Simon does, as a disinfectant of an ingredient in the living animal body, is, in these days of antiseptic treatment, to oppose the most certain principles of scientific surgery. That the expectations and ideas of the first promoters of vaccination have not been fulfilled by the experience of eighty years is shown in the two following opinions with which I conclude this argument. In combating Jenner's idea of the protective quality of a primary vaccination, Dr. Warlomont thus writes (Nov. 12, 1881, *British Medical Journal*): "It has been objected that Jenner's opinion was against it (repeated vaccination). This argument has no weight with me. In matters of experimental science, the predictions of the greatest geniuses only show the imprudence of those who express them. Facts have decided against the predictions expressed on this subject by the immortal discoverer of vaccination." And the *Times* of December, 1880, writes thus:—"It would appear, therefore, as if the advocacy of vaccination might with advantage be placed on a different ground from that which has recently been urged by its supporters, and as if the operation might be recommended or enforced, not as a means of preventing small-pox, but as a means of preventing mortality from it when it occurs." Dr. Carpenter has not given us any clue as to the direction this method of increased efficiency is to take: whether the lymph is to be from a new source, or to be subjected to more careful microscopic examination, or to be taken from the vesicle at a different period, or whether more marks, or more frequent re-vaccinations, or vaccinisation is to characterise the practice. The agent in whose protective virtues we have faith is not enveloped in mystery. Its name, qualities, and permanent influence are amongst the positive facts of science. It is every Englishman's birthright. It has not to be fetched

* Report 1871, page 384.

from a foreign country. It does not need to be cultivated or manufactured. It is the free oxygen in the atmosphere outside the body, and the free oxygen in the red discs of the blood within. Pasteur's experiments demonstrate its power to destroy the most virulent qualities of disease germs, inasmuch as he trusts to its influence to produce his attenuated diseases. His broad generalisation attributes the cessation of all epidemics to its purifying influence. The conditions which are inseparable from a crowded population will account for the prevalence of these contagious diseases. If the carbonic acid is not readily carried away from the lungs, but is allowed to accumulate with the animal matters dissolved in the expired air, the carbonic acid in the blood cannot get out, and fresh oxygen cannot pass in. Hence an absence of that free oxygen in the red discs of the blood which is the true stimulant to healthy action. The degraded condition of the blood, described by Dr. Carpenter as characterising the worst forms of small-pox, is rationally explained by the absence of the due amount of free oxygen. I should be unfaithful to the teachings of physiology, and to the experience of every-day life, if I were to ignore the permanent necessity of this grand agent in nature, and I should be false to the cause of truth if I were to lead the people amongst whom I practise—if I were to teach them to trust, first to the protective virtues of an animal disease, and only, in the second place, to the oxygen of the air. The agent in which we believe is oxygen, and its virtues will stand when all the systems of animal disease inoculations have passed away.

Dr. C. R. Drysdale.—I presume I have been asked to speak out of fairness, because it has been thought that speakers should be heard who take opposite sides. Allow me to say that I entirely agree with everything that fell from our beloved and venerable friend, Dr. Carpenter. I have read many things that he has written upon this question, but I may say that nothing I have ever read is equal in its convincing effect to what he has said this evening. I cannot quite understand how my able friends, especially Dr. Collins, can stand against such arguments. I venture to prophesy that they will not be able to stand any length of time. I sincerely thank your Society for giving us the opportunity of proving again the value of vaccination. I have no hesitation in saying that it was the greatest discovery of its kind ever made. There are one or two points upon which I should like to lay some emphasis. Is it not perfectly clear, looking at these statistics of Dr. Carpenter's, that whereas the small-pox death-rate used to be, during last century, about 1 in 10 of all deaths in London, at the present moment it is about 1 in 62 or 63? I have had the honour of carrying on a paper war with the esteemed member for Leicester, Mr. Taylor, and I think I am not betraying confidence when I say that having the pleasure of meeting him in his own house at Brighton, I mentioned that fact, and he said that the great difference was, that we were in a better sanitary condition than formerly. Now there are many things in which the law is very unequal toward the citizens, but small-pox in former times was no respecter of persons. Every person was amenable to small-pox, whatever else he might be exempt from. In last century, the population of London must have been exceedingly uncomely; but when I look around this audience, I see a number of smooth faces, very different, I think, from what their appearance must have been in London, judging from the old caricatures. I think, therefore, that the ladies especially might say something in favour of vaccination. I wish to take some exception to what Dr. Carpenter says upon a point of theory. He states that during the last ten years the increased mortality has been almost entirely due to the malignancy of the epidemic of 1871. It may be so; but I am inclined to put a little of that severity to the deterioration of the lymph of the present day. Allow me to tell you what lymph was in the days of Jenner. In the Paris Pitié Hospital, in 1802, there were 102 children taken who had been vaccinated a year before, or nine months before, and were inoculated with small-pox all round, but not one of those children took the small-pox; and, as if to make assurance doubly sure, a number of those children were put into the small-pox ward of the hospital in order to try if they would take it naturally, but that also failed. Not one of the children took the disease. It appears to me that the preventive power of vaccination was greater at the beginning of the century than it is now. Last year, in the Small-pox Hospital, there were 491 cases, and of these only 21 were not vaccinated. Only 21 were unvaccinated! Very few of these were children, for the vaccination of the present day preserves us, at least when we are young, for ten years or so. But the vaccine of the earlier part of the century would have preserved us for the whole of our lives. I believe that vaccination from the calf—a practice which is universal in Holland, Belgium, and America—would preserve us, if we were vaccinated in infancy, the whole of our lives. If you are vaccinated on two arms, one with calf lymph and the other with ordinary lymph, you will find that with the calf lymph the scab will remain thirty days, whereas with the ordinary lymph it will remain only fifteen days. Hence, I do not agree, if I may dare to say so, with Dr. Carpenter in putting down the whole of the virulence of the last epidemic to the wickedness of a particular epidemic. I think it partly due to the fact that we have not such a strong prophylactic. And now, as a clincher to my argument, I would say that we should abandon human vaccination altogether, and vaccinate ourselves entirely from the calf. The expense is a mere nothing. It can be easily done, and I am certain will be done.

Dr. C. T. Pearce.—I expected to have heard to-night a lecture on the recent epidemic of small-pox in London, but as the lecturer has taken us to Scotland, to San Francisco, to New England, and other places, perhaps, I shall not be considered out of order if I do not follow him with great consecutiveness, but take here and there some points to which I wish to direct special attention. Stress has been laid on the immunity enjoyed by provincial towns for several years from small-pox, particularly in the year 1880, while London was visited by an epidemic. Credit has been given to vaccination for the immunity of the provinces, and the attack in London has been attributed to the want of efficient vaccination.

That, I say, speaks very unfavourably for the vaccinators. We have been assured by Mr. Simon, in his evidence before the Committee of the House of Commons, in 1871, that the whole of this country was well vaccinated even in 1863; and in 1871 London contained a population which was vaccinated to the extent of 97½ per cent. of the population. If that be the case, the results of the vaccination practice for which this overtaxed country has paid so dearly are sadly disappointing; for we are told that, notwithstanding the great expenditure for vaccination, a very small percentage of those who died of small-pox are found to be properly vaccinated—that is, successfully, or well vaccinated. Dr. Carpenter observed that as the Royal Family had been vaccinated and re-vaccinated, they had not been visited by small-pox. Perhaps Dr. Carpenter has forgotten that his Royal Highness Prince Arthur had an attack of small-pox at Blackheath, where three physicians attended him, and it was said that the vaccination could not have been properly performed. Now, if a Royal vaccinator cannot properly perform the operation, how shall a general practitioner succeed? Let me now make a comment or two on Scotland. Dr. Carpenter has taken the same ground that Dr. Wood took when he gave his evidence before the Committee of the House of Commons in 1871. I have here a little work, now going through the press, which, I trust, will be in your hands in a few days, containing an account of Dr. Wood's evidence. He stated that since vaccination had been so thoroughly and efficiently performed in Scotland, small-pox mortality had diminished to such an extent that it had become quite insignificant, in fact, to all appearance the disease was stamped out. Dr. Wood is a Fellow of the Royal College of Physicians of Edinburgh, and has been its President, and is also a member of the General Council for Medical Education, under the Medical Act of 1858. In 1863, the Scottish Compulsory Vaccination Act was passed. It came into operation on the 1st of January, 1864. In 1871, to question No. 4,366, Dr. Wood replied, "Since the Compulsory Vaccination Act, there is a decided diminution of small-pox; in fact, we have had no epidemic of small-pox in Scotland since the passing of the Vaccination Act eight years ago." In reply to question 4,389, he said:—"The operation of the Act of 1863 has very largely diminished the amount of epidemic small-pox. Both the Registrar-General in his reports and the Board of Supervision have testified to the extreme value of the Scottish Act." To question 4,390, he replied:—"There is no reason to believe that the protection afforded by vaccination has diminished, or that there is the least occasion for any fear *that it will ever regain its former power.*" To question 4,471, he replied:—"The amount of small-pox mortality in Scotland in the last few years has very markedly diminished, as the result, I believe, of a more perfect system of vaccination resulting from putting into operation the Act of 1863." The Third Annual Report on Vaccination of the Scottish Registrar-General states: "Never since the civil registers began in Scotland has small-pox been so rare as during the past three years when the Vaccination Act was in full operation." The Registrar-General's Eighteenth Annual Report for Scotland gives the small-pox deaths in each year from 1855 to 1872. In 1855 the deaths were 1,309; in 1863 they were 1,048; in 1864, they were 1,741. That epidemic, as usual, lasted two years. In 1865 the small-pox mortality fell to 383, in 1866 to 200, in 1867 to 100, in 1868 to 15, in 1869 the number was 64, and in 1870 it was 114. "See what vaccination has done!" exclaimed Dr. Wood; and he showed how superior was an apparatus which was used in Scotland—not a mere lancet, but a machine which effectually vaccinated the patient, and rendered him perfectly safe. It was exhibited before the committee when I was present in 1871, while Dr. Wood was giving his evidence. As I had foretold, the epidemic which had begun in London and Liverpool went to Scotland, and thence to Ireland. In 1871 the deaths from small-pox rose to 1,442, and in 1872 the number was no less than 2,488. Small-pox was "stamped out," they said; but was it? It has been "stamped out" in London I know not how many times. It has been "stamped out" in England, but only to return. So much for Scotland. I could tell you the same tale about Ireland, but let us come back to London. I admit that the London mortality of the last two centuries was heavy. It should be borne in mind that all fevers in those centuries were of a malignant type; and all our medical historians (Dr. Carpenter is not ignorant of the fact) tell us that the subsidence of serious fevers took place toward the middle of the eighteenth century, small-pox following the same course; indeed, small-pox was dying out last century, as statistics show, but it was revived by inoculation. Apart from the period 1650 to 1700, the average mortality when there was no artificial inoculation was 56 per 1,000 deaths, and in the next period, from 1750 to 1800, it was 96, the increase being caused by inoculation. Then from 1800 to 1810 it was 64, and from 1810 to 1850 the figure was 36. That was a great diminution, but was it attributable to vaccination? We say it was not. Credit is taken for vaccination from 1801 to 1810. Mr. Simon ascribes the reduction to vaccination, but as only some 30,000 persons had then been vaccinated in London up to 1810, how could their vaccination protect the remaining million of inhabitants? Dr. Carpenter has stated that in the epidemic of 1880 there were 475 deaths in London, and only ten in nineteen large towns having together a population equal to that of London. The real condition of London is given by the Registrar-General in his Annual Summary for 1880. London is divided into five districts,—the West, the North, the Central, the East, and the South. The west district contains a population of 561,000, and there died of small-pox in 1880, fifty-three. The northern district contains a population of 750,000, and the number of deaths was 185. In the central district, comprising the City and the northern parts of London, including Clerkenwell and Islington, and containing a population of 334,000, there were only 4 deaths. In the east district, containing a population of 640,000, there were 67 deaths. In the south district, containing a population of nearly one million, there were 166 deaths. In the outer ring, outside of the twelve-mile circuit, in a population of 631,000,

there were 16 deaths. Such is the contrast of London at this day with London when small-pox was a pestilential fever, owing to the filthy condition of its inhabitants. Much has been said about the seriousness of small-pox mortality, but it bears a very small proportion indeed to the general mortality. From the diseases, small-pox, measles, whooping-cough, scarlet-fever, diarrhœa, and fever, there occurred 13,340 deaths in 1880, and of all this mortality only 475 were due to small-pox! In the nineteen principal towns, with a similar population, there died only ten. Will it be said that the vaccination in the provinces was so superior to that of London that small-pox was stamped out? If so, what is to be said of the year 1874, when only 56 died in London, whilst in Birmingham alone 639 died? It is absurd to suppose that vaccination protected London in 1874 and failed to protect Birmingham, which had a small-pox mortality in the four years, 1872-5, of 1,234. Again, in 1877, 2,544 persons died in London, whilst only 497 died in the nineteen cities having a similar population. The migration of small-pox from place to place has been overlooked, and it is assumed that all parts of England must be simultaneously affected by small-pox; but every one who has given his attention to epidemics knows that cholera may be raging in one part of England and wholly absent in others. In 1854 and 1866 that was the case. Indeed, observers of epidemics centuries ago recognised that the plague and similar diseases travelled from place to place. In India, Colonel Bedford tells me that he has stood on the Nilgherry hills and seen the cholera cloud pass over, and predicted, when it has settled over a village, that the village would be attacked with cholera, while other villages have been exempt. So I apprehend that these epidemic diseases are beyond control. There is a law which governs the recurrence of small-pox over which vaccination has no influence, or anything, save the observance of sanitary precautions. Epidemics occur at intervals of about six years in the provinces and three years in London. Following the law that I have worked out, by a study of statistics for the last twenty-five years, you may expect a severe epidemic, perhaps of cholera or small-pox, in 1883-4.

Dr. W. J. COLLINS, B.S., B.Sc.—As I have the honour to be connected with that University over which Dr. Carpenter has so long and so ably presided, I have naturally very much respect for anything which he has to say; and hence my regret on this occasion is greater that I feel compelled to differ from him in almost everything he has said. I shall be as brief as possible, and confine myself as strictly as I can to the words laid down in Dr. Carpenter's proposition. First, I must refer to the table before you. That table exhibits a selection of years; the dates certainly do not run continuously, and the periods are very unequal in duration.

Dr. CARPENTER.—They are Dr. Farr's.

Dr. COLLINS.—Dr. Farr, I admit, is the greatest authority in this matter, but I have his own words, which I will read. He says, "Small-pox attained its maximum after inoculation was introduced. The annual deaths from small-pox were 2,323 in 1760-79; in the next twenty years [not figured on the table] they declined to 1,740. This disease, therefore, began to grow less fatal before vaccination was discovered, indicating, together with the diminution in fever, the general improvement in health then taking place." Those are Dr. Farr's own words. I agree with Dr. Farr's opinion. If Dr. Carpenter had placed beside those of small-pox the figures relating to fever, he would have found that fever was declining in the same degree. I ask, what has made fever decline? Certainly not cow-pox; perhaps sanitary improvements. With regard to the proposition of Dr. Carpenter, it consists of three minor propositions. The first is, that there is an increase of small-pox in London. That is an admission on Dr. Carpenter's part, and the only question is, why has it increased in London? In one of his letters to the *Times*, Dr. Carpenter speaks of "the lingering of small-pox in London amongst the unvaccinated residuum." "Lingering" is different from "an increase;" and while lingering might be compatible with the theory of an unvaccinated residuum, increase could not possibly be so, for while the unvaccinated residuum was becoming smaller and smaller year by year, the small-pox mortality had become greater and greater; therefore, tested by the principle of concomitant variation, increased vaccination and diminished small-pox do not stand to one another in the relation of cause and effect.

Dr. CARPENTER.—There is a constant fresh residuum.

Dr. COLLINS.—But the percentage of vaccinations to births is constantly increasing. The second proposition of Dr. Carpenter is that there is no corresponding increase in other parts of the Kingdom. Well, sir, in to-day's *Times* I read:—"Small-pox, which has been more or less prevalent in the Metropolis so long, seems to indicate a tendency to spread into the Midland counties. There have been cases at Bedford, Northampton, Irchester, and Huntingdon, and within the last few days a serious outbreak has occurred at Ampthill." So that Dr. Carpenter is holloaing before he is out of the wood. Thirdly, as to efficiency. No one can speak with greater authority as to the efficiency of the Compulsory Vaccination Act than the inspectors of the Local Government Board. What do they say? Dr. Stevens, who says he has seen more vaccination than any man living or who has ever lived, says:—"The present system is as perfect as a system could be made, and as efficacious as could be desired." Then Dr. Ballard says that in 1871 the Compulsory Vaccination Act was perfected. Now, in 1871, according to Dr. Seaton, we had the worst epidemic of small-pox within living memory. Then, again, so efficient is this system of compulsory vaccination, that the public vaccinators in London alone in one year, 1879, received £2,482. 17s. as awards over and above their ordinary fees for the excellence of the work done. Dr. Carpenter has referred to places less well vaccinated than London, such as Leicester and Keighley, which exhibit little or no small-pox, and he explains that by saying that their susceptibilities—congenital susceptibilities of which we have heard so much—have not been tested. Now, we could not appeal to a greater authority than Mr. Ernest Hart, who, everybody knows, has a monopoly of truth upon all subjects con-

nected with vaccination. In reading Mr. Ernest Hart's journal (the *British Medical Journal*) of March 13, 1881, we find this statement:—"Small-pox has, it is stated, broken out in Leicester. Mr. P. A. Taylor's constituents may possibly have an opportunity of estimating the worth of the anti-vaccination movement with which their representative has identified himself." So that their susceptibilities were tested in Leicester in 1881.

Dr. CARPENTER—I think there is no case in 1881 in the Registrar-General's report.

Dr. COLLINS—You must square that with Mr. Ernest Hart, sir.

Dr. CARPENTER—I go by the Registrar-General's report.

Dr. COLLINS—I cannot guarantee that I am a faithful believer in Mr. Ernest Hart's statements. The constituents of Mr. Peter Taylor, then, according to Mr. Ernest Hart, have had an opportunity of testing the worth of the anti-vaccination movement, and they find that while in badly-vaccinated Leicester there has been only one death from small-pox since 1874, in London, small-pox is a perennial visitant, and the people have been dying by the thousand. I submit that if small-pox in London is so prevalent, because it is so badly vaccinated, compared with the rest of the country, we ought to find that in those parishes in London in which the vaccination is best, there is the least small-pox, but this does not hold. Poplar, for instance, the second-best vaccinated parish in 1877, was the second worst in the small-pox list. Then Hackney, to which Dr. Carpenter referred was fifth best on the vaccinated list, and yet was the fourth worst on the small-pox list.

Dr. CARPENTER—There is not so much difference.

Dr. COLLINS—You do not understand me. It was the fifth best vaccinated parish and the fourth worst as regards small-pox mortality. It is hardly fair of Dr. Carpenter to look to the increased efficiency of the Act in future as the means of exterminating small-pox, when increased efficiency in the past has not been accompanied by any diminution. The table that has been brought before us does not give the last decade. I have the figures of the last decade here, and if they were added, the facts would be as follows:—population, 3,466,486; deaths from small-pox, 15,551; or about 500 per million, showing, after nearly thirty years' compulsory vaccination, a mortality twice as great as in the preceding decade. What, then, is the real cause of the continuance and increase of small-pox in London? I think we find an answer in the last annual summary of the Registrar-General's return. I will read five small paragraphs. "The decennium which closed with 1880 was one of lower mortality in London than any of the preceding decennial periods.' . . . . "These facts are strong evidence that the sanitary efforts of recent years have not been unfruitful." . . . . "It will be found that the saving of life was almost entirely due to diminished mortality from those causes whose destructive activity is especially amenable to sanitary interference—namely, the so-called zymotic diseases." . . . . "The death-rate ascribed to fever fell nearly 60 per cent., ... that from scarlatina and diphtheria fell 33 per cent." . . . . "One disease alone in this class showed exceptionally a rise, and no inconsiderable one. This was small-pox, which, owing to the two great outbreaks of 1871-72 and 1877-78, gave a death-rate nearly 50 per cent. above the previous average." Thus, that zymotic disease alone against which we invoke a special prophylactic, is the only one which has increased, while all those which we fight on broad sanitary principles, have one and all declined. Vaccination, sir, has blinded us to the real cause of small-pox. It has made us look more to the scars upon the arm than to the health of the individual and his sanitary surroundings. If we fortify the body and purify the surroundings, in my humble opinion the disease will vanish away. I know Dr. Carpenter does not agree with that. In one of his letters he has told us that "small-pox is a disease over which general sanitary measures have little or no control." I am happy to find Dr. Carpenter contradicted by leading sanitarians on the subject, Dr. Richardson, Mr. Edwin Chadwick, and Dr. Carpenter's namesake at Croydon. I also venture to think, with the greatest deference, that Dr. Carpenter is contradicted by himself. In a most instructive and interesting article by him in the "British and Foreign Medico-Chirurgical Review," 1853, there is this paragraph, in which he has been stating that normal healthy blood has a resistant power towards disease germs, and he goes on:—"If it be inquired, what is the practical bearing of this discussion we at once reply that, if our view be correct, it would be possible to extinguish the greater number of epidemic diseases, however intense or abundant may be the atmospheric or other agencies which constitute their potential causes, by preserving the blood of every individual in a state of unfermentibility, which shall effectually prevent these persons from finding the conditions of their development within the body." If I might venture to reconstruct the proposition which has been put forward by Dr. Carpenter, I would do so as follows:—The increase of small-pox mortality in London under a vaccination system as perfect as it can be made, accompanied by a decline of all other zymotics, a reason not for more vaccination or more compulsion, but for seeking out, ascertaining, and removing the causes under which small-pox, like all other zymotic diseases, arises and prevails, and diminishing the predisposition thereto by improved sanitation. In conclusion, I venture to think, with the greatest respect and deference to those gentlemen who, like Dr. Carpenter, are strongly in favour of vaccination, when the facts are so strongly against them, that they are labouring under what has been termed "a fixed idea." No one has written with greater force upon that subject than Dr. Carpenter himself. It simply amounts to this: the mind is so filled and possessed with one predominant principle, that however much the evidence may be against them, they are unable to change their minds. This is what Dr. Carpenter says himself in his "Mental Physiology"—an excellent work: "There is no end to the strange performances which may be thus called forth; but they are all referable to one simple principle—the possession of the mind by a predominant idea which the individual himself has lost all power of testing by his present or past experience, simply because he

cannot direct his thoughts to any other object." Dr. Carpenter's motto might be, "*Ruat cœlum fiat vaccinia.*" Let small-pox after vaccination abound, but vaccination is right, nevertheless! There is one point on which Dr. Carpenter has the advantage of his opponents: he is to have the last word. But, sir, I am quite prepared to concede that advantage. I have no fear of the result, for, in my humble opinion, all the ability which Dr. Carpenter can bring to bear, and all the eloquence for which he is so widely famed, will not be able to bring forward one single fact in favour of compulsory vaccination which cannot be fairly, fully, and entirely overthrown.

Dr. E. HAUGHTON.—As in other questions, Professor Carpenter has shown candour of mind, and a disposition to consult the public good, I do not think he will be slow to give attention to any trustworthy evidence that may be brought before him. I have always respected Professor Carpenter, and one of the oldest books in my possession was given me as a prize for anatomy and physiology, at the University of Dublin, namely, Carpenter's "Physiology." It therefore fills me with surprise that he should not have made himself acquainted with certain facts, which anyone who chooses to go to a right source may obtain. Certainly you will not get them in the *Times*, or in the medical journals. It is not the policy of the medical journals to publish both sides of the question. You have an advantage in attending this meeting which you would not have even at a medical society. When the question of the introduction of heifer-lymph was brought before that great British Medical Association, the chairman, Mr. Ernest Hart, declined to allow a motion to be put to the meeting. Why? Because there was not sufficient unanimity as to what vaccination was, to frame a reasonable resolution. At the last annual meeting at Ryde, great difficulty was experienced in formulating conclusions that would not seem to give encouragement to "those wicked anti-vaccinators who are the cause of so much trouble." The first idea was that a motion should be carried, appealing to the Local Government Board to provide a new supply of lymph, several speakers having shown that there were reasons for not having any great confidence in the lymph in present use; but I think our friend Dr. Drysdale interposed, and said that if such a motion were carried, it would give encouragement to those troublesome anti-vaccinators, who would consider it a kind of triumph to have a doubt thrown upon the current issue of lymph. A motion was therefore devised to this effect—that, although the profession has the fullest confidence in the ordinary supply of vaccine lymph, and considers it to be very good, nevertheless, the Government ought, as soon as possible, to provide a different supply—a supply of heifer lymph. And although it had been stated at the meeting that there were several distinct sources of supply of the said heifer-lymph, all differing more or less from one another, yet no one ventured to indicate which one of these supplies ought to be resorted to. The result is that any reasonable person can perceive that the whole question is in doubt and abeyance. We do not know what we mean when we use the word "vaccination." How, then, is it possible to frame a resolution, or to predicate anything respecting it? We must have some definite conception of what we are speaking about before we can say whether it is good, bad, or indifferent. With regard to the *Nineteenth Century*, I think Dr. Carpenter made an observation to the effect that, if we chose, we could get our views expressed in such journals. Now, that is a mistake. A good many gentlemen have written to the *Nineteenth Century*, but the Editor will only permit vaccination to be vindicated, not impugned. Nevertheless, the last number of the *British Medical Journal* says vaccination is a "vexed question," in referring to this meeting. Anyone who had said as much ten years ago at a medical meeting would have been laughed to scorn. Vaccination is now admitted to be a vexed question. Again, when Dr. Carpenter wrote to the *Spectator*, the Editor of that journal told me himself that he would not insert any reply whatever, these anti-vaccinators being people who wished to make out that two and two make five. We have heard to-night something of the manner in which argument is met by the said anti-vaccinators, and we see they are as able to calculate as some other people. With regard to Scotland, I recollect some years ago an article appearing in the *Lancet* as to the low mortality from small-pox in that country. As to that, there are two ways of looking at it. It so happened that a friend having referred to the Registrar-General's Report as to the total Scottish mortality, this singular fact came forth, namely, that when small-pox was least in Scotland, then the general death-rate was highest. Thus vaccination might be no more than a means of killing people to save them from dying! I do not say so merely in jest. The converse of the proposition is just as remarkable. My friend Dr. Pearce has tabulated a variety of statistics relating to the rate of the general mortality when small-pox is prevalent; and what does he find? That, whenever small-pox is prevalent, in almost every instance, and in every country in Europe, there is a low general death-rate. You can verify that statement for yourselves. The epidemic of 1871-2 was the greatest that any man in this room can recollect, even including our venerable friend, Dr. Carpenter. It prevailed not only in England, but in almost every well-vaccinated country in Europe. Spain, I believe, escaped, Spain not having adopted compulsory vaccination. In Holland, Belgium, France, Prussia, and other European countries, the variolous death-rate was very high. In Berlin, almost all the population are re-vaccinated; certainly every adult is re-vaccinated; all the males are re-vaccinated when they enter the army, and all children when they go to school; and, I believe, in the event of marriage, men and women have to give some evidence of having undergone the operation. What was the result? That whereas in London the small-pox death-rate was so high as to surprise us, in Berlin the mortality was six times as great as in London. Then, again, Mr. W. E. H. Lecky, the historian, told us that vaccination had abolished small-pox in Ireland. He took so much for granted on the strength of other people's statements. Yet before the ink was dry upon his paper, the Belfast small-pox epidemic had broken out! About the same

time an article appeared in the *Standard*, saying that small-pox was abolished in Ireland as the effect of good vaccination. But at that very time there were seventy cases in the Belfast infirmary! When Ireland had the epidemic, it had it in earnest. Dr. Carpenter says there is no anti-vaccination in Scotland, but the assertion is premature. Professor M'Call Anderson delivered a lecture before the Glasgow Young Men's Christian Association, and picked out a particular decade to prove how small-pox had abated under the influence of vaccination. He judiciously avoided the subsequent decade, which proved just the contrary, and a friend of mine, a canny Scotsman, looked up the facts, and published them in the newspapers, and the truth being manifest, we may look for the consequences in due season in the public opinion of Scotland. Statistics are valuable when they are taken upon a sufficiently large scale; and in the case of small-pox, it is essential to have the ages as well as the numbers of the sufferers. If not studied in a liberal and intelligent spirit, statistics may become, as Mr. Spurgeon says, a new mode of lying by figures.

Dr. CARPENTER, in reply.—At this late hour, I shall not attempt to go over the various remarks that have been made. With regard to Mr. Robinson's address, I really cannot find anything to answer, because I entirely agree with him as to the benefits of oxygen. The only question is how we are to bring about that which he recommends. I believe that the special malignity of small-pox in the present epidemic is due to the manufacture, so to speak, of a specially malignant virus by overcrowding in the Franco-German War. We have had plenty of instances of the same kind. I could go back to last century, and tell you how a mild remittent fever was converted into a most malignant typhus, that spread along the coast of England, by means of soldiers battened under the hatches in stormy weather, in a six weeks' passage from the Low Countries to Scotland. No one who has studied the history of epidemics has the smallest doubt as to such facts. But, then, how are we to sweep away London and reconstruct it? How are we to sweep away Glasgow and reconstruct it, and bring oxygen to bear upon everybody? No doubt, if we could, it would be an excellent thing. I have expressed as strong an opinion upon that point as anyone; but Mr. Collins did not lay stress upon the little word *mostly*. I spoke of a large proportion of epidemic diseases, or nearly all epidemic diseases. I had small-pox and scarlatina expressly in my mind as exceptions, when I wrote that paragraph; because they are diseases of all others peculiarly communicable by direct personal contact or contact with something that has touched the person. I do not believe that any sanitation will utterly extinguish them—at least, I cannot look forward to the time within any reasonable period at which that should be the case; therefore if we can get something else in the meantime, surely that something else should be used. Mr. Collins accuses me of having "fixed ideas;" well, I have had this idea for fifty years, ever since I began to think about such matters. No doubt it is a fixed idea, but I am not above learning; and I have applied for the best information attainable to the superintendents of small-pox hospitals in London. I did not think of writing to the superintendent of the old Small-Pox Hospital; but I wrote to the Medical Superintendents of the four Asylum Boards Hospitals; and what facts do I get? Dr. Drysdale told you that in the Small-Pox Hospital they had very few cases of unvaccinated persons; but what are the facts here? In the Fulham Hospital, the total number of cases last year was 1,782; the total number of deaths was 250. The total number of vaccinated admissions was 1,378; putting aside 189 "doubtful," the certainly unvaccinated were 215. Taking the mortality in the whole number of vaccinated of all shades—good, bad, and indifferent, all those with any marks at all—the percentage of mortality was 7·22; of the 215 unvaccinated, there were 92 who died, giving a percentage of very nearly 43 per cent. It seems to me that anybody must be possessed of a very fixed idea, who cannot see the protective influence of vaccination in that.

Mr. EMERY.—I wish those figures had been quoted before the other speakers had sat down. I could answer them myself.

Dr. CARPENTER.—I stated as a general fact that among the unvaccinated, according to the experience of the last ten years in the hospitals, the mortality had been from 40 to 45 per cent., and stated it distinctly. I said that it was a mortality higher than had been known in modern times.

Mr. EMERY.—You say there is a greater mortality among the unvaccinated than there is among the vaccinated; but, if you put vaccinated and unvaccinated together, what is the difference between the total mortality from small-pox at this date and in the years prior to vaccination? The greater mortality in the unvaccinated (supposing they are unvaccinated) is to be accounted for by the age and surroundings of each case. If circumstances are not taken into account, we merely deceive ourselves by such statements.

Dr. CARPENTER.—The greater mortality of the unvaccinated at the present time in these hospitals is explained by this simple fact—the enormous proportion of the excessively severe cases which we have not seen in the present generation till the year 1871. During 1881 there were in the Fulham Hospital no less than 113 cases of the severest form of the malady (46 hæmorrhagic and 67 petechial), and 108 deaths. Not a single case of this number was "well" vaccinated. In the reports from the other hospitals also, there was a large number of these hæmorrhagic cases, and not one of these patients had been "well" vaccinated. At the Deptford Hospital, the total number of vaccinated admissions in 1881 was 2,263, and of deaths in this class 173, giving a percentage mortality of 7·6; while of the unvaccinated, the admissions were 539, and deaths 254, giving a death-rate of 47·1. At this hospital there were no fewer than 140 cases of the "malignant" type. At the Stockwell Hospital, the total number of vaccinated admissions in 1881 was 716, and the deaths were 47, or at the rate of 6·7 per cent.; while out of 197 unvaccinated, 93 died, making their death-rate 47·2. It is clear, therefore, from the extraordinarily high death-rate among the unvaccinated, that the epidemic, which last year returned upon us, has lost none of its

deadliness. These are facts which, I repeat, seem to me to require a very fixed idea indeed not to see the bearing of.—As to the Scotch mortality, set forth by Dr. Pearce, I distinctly said that the epidemic of 1871 affected Scotland most severely; and that it lasted for three years subsequently, instead of dying out the next year, as in London. I said that it was since that epidemic, that small-pox had undergone an extraordinary reduction.—I fully recognise the fact that in last century there were a great many places where there was no small-pox for years and years; but why? What were the communications then between one place and other. In the days of the old slow-going coaches there was very little communication and migration. What is it now? I fully admitted that the increased small-pox mortality produced by inoculation did not show itself so much in London as in the country; and that inoculation did a great deal more harm in the country, by introducing the disease into places it would not otherwise have visited, than in London. I entirely believe that the progress of sanitary improvement has affected a great change. But has any body been able to give any other account than I have given, of the increased mortality during the decade 1871-80? What other hypothesis is there to account for the extraordinary severity of that type of small-pox, when our general sanitary condition is improving? If the general sanitary condition has so much improved as speakers have said, how is it that we had this sudden outbreak—this most severe and terrible outbreak—terrible, not so much in the number attacked, as in its fearful mortality? There is the fact that the non-vaccinated population has shown a susceptibility to the most fearful form of small-pox, such as has never before been known in this generation. It was a most malignant type of disease, and everybody who has studied the history of epidemics knows that these malignant types are the most infectious. They give off doses of poison far greater than the ordinary forms of small-pox. Can anybody account for this extraordinary development in the decade 1871-80, in any other way than by admitting that it is a thing that has been bred elsewhere, imported and carried to every country all over the world. I say that the whole small-pox experience from 1871 to 1880 and 1881 is clearly a continuance of the same epidemic,—an exceptional phenomenon, which should not be taken into account in the table. I did not hear Mr. Robinson, or Dr. Pearce, or Dr. Haughton, or Mr. Collins give any account of the peculiar characters of this epidemic. I am reproached for not paying attention to the facts that the anti-vaccinators bring forward; but I have gone to the best sources of information I could. I do not swear by every word that Mr. Ernest Hart, or anybody else, has said; I form my own conclusions. With regard to what was said by Pasteur, that answer of his was taken out of its connection. True; he said it was "an open question." It was considered to have been settled by the Lyons Commission that small-pox and cow-pox were entirely different diseases. I asked M. Chauveau, the head of that Commission, and M. Pasteur, what they *now* thought; and they both agreed that Pasteur's discoveries had re-opened the question—re-opening a thing that had been considered to be settled in an opposite sense.

I am much obliged for the courtesy with which every speaker has treated me personally, and for the kind attention that you have given to me. I feel sure that you are satisfied of my honesty in this matter. If I have, as Mr. Collins said, a "fixed idea," it is an "idea" which has become "fixed" just because I have the same belief in it, as honestly deducible from the collection of facts I have taken the greatest pains to obtain, as I have in any scientific fact whatever.

The CHAIRMAN: There may be some grounds of difference of opinion between us on the subject discussed, but there can be no ground for difference of opinion as to the debt that we owe to Dr. Carpenter for having come amongst us to-night, and given us his time and the results of his thought; I therefore ask you to testify your obligation to him by a hearty vote of thanks.

The vote of thanks was carried by acclamation.

Mr. TEBB: May I also ask you for another round of applause to testify your thanks to Dr. Andrew Clark for so ably presiding.

Dr. CARPENTER: Allow me to support the motion. Dr. Andrew Clark's time is pecuniarily of greater value than mine. It was at my special request that he came here to-night. Originally, Mr. Young suggested his name as a possible chairman, and I was extremely glad to secure his kind services.

Carried by acclamation.

GENERAL DEDUCTIONS

From the particulars of the 7,425 cases of small-pox received into the Homerton Small-pox Hospit during the decade 1871-80, *and tabulated on one uniform system by Dr. Gayton.**

TABLE I.

Classification of Cases and Deaths in regard to Age and Vaccination.

	Total Admissions, 7,425			Total Deaths, 1,377.			Percentage Mortality, 18·8.		
	Total.	Under 10 years.	Above 10 years.	Total.	Under 10 years.	Above 10 years.	Total.	Under 10 years.	Above 10 years.
Vaccinated ...	4,859	662	4,197	379	43	336	7·8	6·5	8·0
Unvaccinated ..	1,689	924	765	754	442	312	44·6	47·8	40·8
Doubtful	877	190	687	244	52	192	27·8	27·4	27·9
	7,425	1,776	5,649	1,377	537	840	18·8	30·2	14·8

1. Thus, the vaccinated admissions were *nearly three times* as many as the unvaccinated.

2. But the total vaccinated deaths were (almost exactly) *half* the unvaccinated deaths.

* The table itself, as far as 1878, has been already published in the Report of the Metropolitan Asylums Board. All cases are ranked as vaccinated, which presented *any* distinct vaccination-mark. All cases are ranked as unvaccinated, in which the statement to that effect was confirmed by the entire absence of vaccination-marks; and all cases are ranked as doubtful in which either no evidence whatever could be obtained in regard to vaccination, or as to which the entire absence of vaccination-marks did not confirm the statement that they had been vaccinated. These marks were all looked for and recorded (wherever possible) on the *admission* of the patient, and the record was *never subsequently altered*.

3. The proportion of deaths to admissions was thus *nearly six times* as great among the unvaccinated as among the vaccinated. [The general death-rate of the unvaccinated is *slightly above* the 44·0 per cent. stated by Dr. Carpenter last year on the authority of the Vice-Chairman of the Metropolitan Asylums Board, and deemed "incredible" by the *Vaccination Inquirer*, who was ignorant of the fact that a large part of the mortality of this epidemic is due to the prevalence of the "malignant" type of small-pox peculiar to it.]

4. Of the total of vaccinated admissions, *less than one-seventh* consisted of children under ten years of age; and of the total vaccinated deaths, those of children constituted *little more than one-ninth*, making their death-rate only 6½ per cent.

5. Of the total of unvaccinated admissions, *nearly 55 per cent.* consisted of children under ten years of age; and of the total of unvaccinated deaths, *nearly 59 per cent.* occurred among children, raising their death-rate to nearly 48 per cent.

6. Of the total of vaccinated admissions, *more than six-sevenths* were above ten years of age, and very few, if any, of them had been re-vaccinated; and though *nearly eight-ninths* of the deaths among the vaccinated occurred above the age of ten years, yet the death-rate among these was only 8 per cent.

7. Of the total of unvaccinated admissions, those above ten years of age were only *about 45 per cent.*; and of the unvaccinated deaths, those above ten years of age constituted 41 per cent., their death-rate being 40·8 per cent.

The theories advanced by the anti-vaccinationists to account for the high death-rate of the unvaccinated as compared with the vaccinated, is that the former are for the most part cachectic subjects, drawn from the lowest class of the metropolitan population. But they have produced no evidence of this from the experience of the medical officers of the small-pox hospitals. And this theory, even if admitted to be true to a certain extent, can scarcely be "forced" so far as to account for such an enormous disproportion as that of more than *seven to one* between the death-rates in unvaccinated and vaccinated children. And it is obviously inapplicable altogether to the regular gradation in the death-rates of the "well," "fairly well," "indifferently," and "badly" vaccinated, as shown—alike in those *under* and those *above* ten years of age—in the following table:—

Arm-marks.	Admissions.		Deaths.		—	Percentage Mortality.	
	Under 10.	Above 10.	Under 10.	Above 10.		Under 10.	Above 10.
4 Good.	56	247	0	4	} Good.	0·0	2·5
3 Good.	44	388	0	12			
2 Good.	41	528	1	19	} Fairly Good.	2·4	4·1
1 Good.	43	422	1	20			
4 Imperfect.	91	317	3	17	} Indifferent.	3·0	6·9
3 Imperfect.	107	545	3	43			
2 Imperfect.	142	930	17	92	} Bad.	12·5	12·6
1 Imperfect.	138	820	18	129			
Totals	662	4,197	43	336	Average of Totals	6·5	8·0

Observations by the Editor.

We print the foregoing Homerton Returns at Dr. Carpenter's request, desiring that he should establish his position to his complete satisfaction. It is hardly necessary for us to repeat once more the single word, Incredible! We know the mortality from small-pox in pre-vaccination times; it was about 18 per cent., or the same in the total of cases as at the present day. When, therefore, we are told that the unvaccinated die at Homerton at the rate of 44 per cent., we laugh the communication to scorn. It is in vain to multiply figures in proof. We say they are incorrect; that we know they are incorrect; and that, however sworn to, we should still reject them as incorrect. In this matter we are hardened and hopeless unbelievers.

We say, further, there is not an unvaccinated population in London to furnish the quota of unvaccinated patients asserted.

We also demand, Who are the unvaccinated? Where do they come from? What are their circumstances? In the nature of the case, they are of a lower grade, socially and physically, than the vaccinated; and unless that grade be defined and recognised with all it represents, it is mockery to institute a comparison between them, with the slightest pretence to scientific accuracy.

The radical error in these Hospital Tables consists in the illusory classification of cases under the influence of a blinding prepossession in favour of vaccination. It is taken for granted that a severe case of small-pox is necessarily an unvaccinated case; and as in such cases the vaccination marks are invisible, they are unhesitatingly registered as unvaccinated. We do not say that such classification is fraudulent in intent. On the contrary, we say it is honest with the honesty of inbred faith and fanaticism. Nor do we make this assertion lightly. Over and over again, where investigation has been possible, severe cases of small-pox in the vaccinated have been traced registered as unvaccinated. The defence on exposure has usually been that the severity of the small-pox was certain evidence of the absence of vaccination! For those who care to see how the vaccination oracle is worked, let us commend to their attention a three-penny pamphlet by Mr. John Pickering, entitled, *The Statistics of the Leeds Small-Pox Hospital Exposed and Refuted*, published at 114, Victoria-street. Mr. Pickering's experience represents a large mass of the same order.

Dr. Carpenter's vaccination faith is omnivorous. He believes in vaccination marks as representative of degrees of protection from small-pox. Why not, then, introduce vaccination as a substitute for tattooing with which so many lads are infatuated? Mr. Marson, the originator of the marks doctrine, communicated another of his discoveries to a committee of the House of Commons. It was that fathers objected to vaccination in order that their families might be kept low by small-pox, so that thus they might have the fewer children to work for. We scarcely suppose that Dr. Carpenter concurs with Marson in that homicidal imputation. If there is any vestige of reality in the marks doctrine, it is probably limited to the fact that a person of good constitution heals well and

exhibits sharply-defined vaccination marks, and that the same constitutional vigour tends to a good recovery from small-pox.

OBSERVATIONS BY MR. ALEXANDER WHEELER.

Mr. Wheeler, who has given much attention to Small-pox Hospital reports has communicated the following observations:—

It is a great pity that Dr. Carpenter, instead of following Dr. Gayton in his tabulation, does not do his tabulation himself. Here is a "great discovery," some say the "greatest discovery in medicine," placed on its trial. It is a question whether vaccination is a preventive—a prophylactic. To touch it scientifically, we must therefore be perfectly sure we are not reckoning vaccinated persons as unvaccinated in any statistics we use. Yet here is Dr. Carpenter taking the very opposite course. Every assumption is passed as correct, if it is only against the unvaccinated. Doubt must be driven to the last refinement in some cases; but, in trying the cases of post-vaccinal small-pox, doubt is only permissible if it is applied to the faded or obscured mark of vaccination. Before us lies the very worst death-rate of small-pox patients we have seen, as happening in pre-Jennerian times. It is the Statistical Abstract of the London Small-pox Hospital, 1746 to 1762. There were 6,456 cases of small-pox "taken in the natural way"; 1,634 died, or 25 per cent. of the whole. It is expressly stated in the report that "most of them were adults, often admitted after great irregularities, and some when their cure was despaired of."

There is here a mortality of 8 per cent. heavier than Dr. Jurin's, which was spread over six times the area as regards numbers, and is, therefore, more reliable; but the point is, that this 25 per cent. is the very heaviest unvaccinated hospital small-pox death-rate, *before Jenner*, and after Sydenham's treatment came into use. What have the gentlemen who, like Dr. Gayton and Dr. Carpenter, are claiming to kill 40 and 44 per cent., and even 50 per cent. of the unvaccinated, to say to this? Why do the modern unvaccinated die at 20 and at 26 per cent. in excess of the pre-Jennerian times? It is idle to talk of the malignant small-pox as anything new, or anything explanatory. The small-pox in the last ten years is just what it was in 1649, and in 1749, and in 1849. It has been during all this time an unchanged disorder. And the proof is to be found in the works of Sydenham, Jurin, Wagstaffe, Massey, Von Swieten, and others, and in our own hospital records. On an average, 18 per cent. of the cases during all this time may, from the existing evidence, be said to have succumbed. And, it will be observed, Dr. Carpenter shows 18·8 as the common overhead death-rate at Homerton at this day. Jurin's was less, and even when including the figures I have given from the old small-pox hospital, Duvillard, who uses Jurin's figures, does not make the death-rate of natural small-pox exceed the 18·8 per cent.

If scientific men will apply their research to the question without bias, they will find there is positively no ground whatsoever for glorying in any gain as regards the mortality of modern over pre-Jennerian small-pox.

It is of little use telling Dr. Carpenter or anyone else taking his ground, that in fighting for a percentage advantage to the vaccinated they have utterly abandoned Jennerian ground. But we have some right to demand that when the Jennerian stand is thus shifted, we shall be positively sure, by an appeal to the register, that no vaccinated cases are used as unvaccinated. At present the unvaccinated are an *assumed quantity* in all our hospital records.

PRIMITIVE VACCINATION—1806.

DR. DRYSDALE accounts for the failure of vaccination to prevent small-pox by asserting that the virus in use has suffered degradation. The answer is, that vaccination in Jenner's day was not a whit more efficacious. The failures (allowing for the smaller number of the vaccinated) were as positive and conspicuous, as will be discovered by whoever examines the contemporary literature of the period. The other day we had placed in our hands some extracts from a journal kept by the father of a large family of remarkable distinction and intelligence. There were fourteen in family, including the parents—eight daughters and four sons. In succession two sons and seven daughters were *inoculated*. The eighth daughter was *vaccinated* about 1802, and the next, a son, was also vaccinated; but when the last child was born, he was *inoculated*, on account of the parents' distrust in vaccination. The father writes:—

"Mr. M. to-day inoculated J.—April, 1806. We have no faith in vaccination, which was tried on M. and F. We have had many proofs of its utter worthlessness, especially on our son F., who has been subject to glandular swellings in the throat, which we refer to his vaccination."

Of all these children, only one, as an adult, had small-pox—namely, vaccinated F., who, in 1830, as a clergyman in Hertfordshire, was infected by a friend, a clergyman, whom he visited when recovering from small-pox, without fear, confident in the protection of his vaccination!

The two clergymen mentioned, and two others, all of whom had been carefully vaccinated with virus undegenerate, according to Dr. Drysdale's fancy, living near Hemel Hempstead, had small-within five years, two of the cases being confluent.

Such was primitive vaccination! What a commentary on Jenner's assertion, in his petition to Parliament, that "cow-pox is attended with the singularly beneficial effect of rendering, through life, the persons inoculated therewith perfectly secure from the infection of small-pox!"

MR. R. H. HUTTON, in an article in the *Nineteenth Century* against Vivisection, observes:—"I, for my part, have always thought that genuine inoculations—the only *very* fruitful experiments among those of recent times—should be included in the class of small pains, and sufferings, and risks such as we may fairly require of the creatures beneath us."—The credulity of men of letters in contact with men of science, so-called, is touching. Mr. Hutton, in saying that experiments in inoculation have been "*very* fruitful," refers, of course, to M. Pasteur; but imagine his embarrassment if required to return a definite answer to the question—*Very* fruitful in what?

DEATH-RATE OF LONDON.

BY DR. CARPENTER. (Feb. 3, 1882.)

YEARS.	PER MILLION LIVING.	
	GENERAL DEATH-RATE.	SMALL-POX.
1629-35	**50,000**	**1,890**
1660-79	80,000	4,170
1681-90	**42,000**	**3,140**
1728-57	52,000	4,260
1746-55	**35,500**	**3,040**
1771-80	50,000	5,020
1801-10	29,200	2,040
1831-35	32,000	330
1838-40	**25,710**	**1,013**
1841-50	24,800	400
1846-55	**24,900**	**338**
1851-60	23,700	278
1861-70	24,400	276
1871-80	**22,800**	**450**

The above table, with the exception of the figures in block type, is a fac-simile of that produced by Dr. Carpenter on Feb. 3, 1882, to illustrate his lecture to the London Society for the Abolition of Compulsory Vaccination.

His table down to the year 1835 is an abstract of Dr. Farr's, cited by Mr. Simon in his "Papers," 1857. The top line 1629-35 was suppressed by Dr. Carpenter, and shows that small-pox was *less fatal then than in the decennial period* 1801-10.

Dr. Carpenter complained that "anti-vaccinators took *selected years*," and commented on my giving the mortality of each epidemic.

The most extraordinary feature in his table is the omission of the decade 1871-80; more especially as the three previous decades he *selected* from the Registrar-General's Annual Summary of 1880, p. 20, which includes the decade 1871-80.

Dr. Carpenter says that the mortality in 1801 to 1810 was halved by Dr. Jenner's vaccination. Moreover, he states that the now normal death-rate from small-pox is 276 per million, suppressing or witholding the death-rate in 1871-80, which was 450, while in 1871 it was 2,430 per million.

C. T. PEARCE.

MR. P. A. TAYLOR'S BILL.

MR. TAYLOR moved in the House of Commons, Feb. 9: "That leave be given to bring in a Bill to repeal the Compulsory Clauses of the Vaccination Acts." On the motion being put, the House divided, the Ayes being 107, and the Noes 58. The tellers for the Ayes were Mr. P. A. Taylor and Mr. Hopwood, and in the majority we note the names of Mr. Childers, Mr. Courtney, Sir C. W. Dilke, Mr. Fawcett, Mr. W. E. Forster, Mr. Gladstone, Mr. H. J. Gladstone, Mr. Goschen, Sir W. Harcourt, the Marquis of Hartington, Sir F. Herschell, Mr. Hibbert, Sir Henry James, Lord Kensington, Sir Wilfrid Lawson, Messrs. Samuel and Arnold Morley, Earl Percy, Mr. W. Rathbone, and Professor Thorold Rogers.

The constitution of the minority of 60, inclusive of the tellers, Mr. R. N. Fowler and Mr. Warton, is curious and instructive, and is thus classified:—

ENGLISH CONSERVATIVES—30.

Sir W. B. Barttelot, West Sussex.
Hon. St. John Brodrick, West Surrey.
Henry Chaplin, Mid-Lincoln.
Lord Randolph Churchill, Woodstock.
W. Coddington, Blackburn.
H. T. Davenport, North Staffordshire.
Hon. G. C. Dawnay, N. R. Yorkshire.
R. N. Fowler, London City.
M. Fenwick-Bisset, West Somerset.
Sir H. Fletcher, Horsham.
Hon. T. F. Fremantle, Bucks.
J. C. Garnier, South Devon.
Sir H. S. Giffard, Launceston.
G. B. Gregory, East Sussex.
Lord G. Hamilton, Middlesex.
Sir H. T. Holland, Midhurst.
Sir J. McGarel-Hogg, Truro.
Sir C. H. Mills, West Kent.
E. L. Pemberton, East Kent.
J. H. Puleston, Devonport.
James Round, East Essex.
W. M. St. Aubyn, Helston.
C. Schreiber, Poole.
Lord H. Scott, S. Hants.
M. D. Scott, East Sussex.
Hon. Ed. Stanhope, Mid-Lincoln.
George Storer, South Notts.
J. G. Talbot, Oxford University.

LONDON.

Table showing the Computed Death-rate of Small-pox prior to 1838, and the actual certified Death-rate since 1838.

COMPILED BY C. T. PEARCE.

PERIODS.	YEARS.	PER MILLION LIVING.		Population.	DEATHS. Small-pox.	Annual Average.
		All causes.	Small-pox.			
7* years	1629-35	50,000	1,890			
20 ,, ...	1660-79	80,000	4,170			
10* ,, ...	1681-90	42,100	3,140	530,000		1,664
30 ,, ...	1728-57	52,000	4,260			
15* ,, ...	1746-55	35,500	3,040	653,900		1,991
10 ,, ...	1771-80	50,000	5,020			
10 ,, ...	1801-10	29,200	2,040			
5 ,, ...	1831-35	32,000	830			
3* ,, ...	1838-40	25,710	1,013†	1,800,000	5,686	1,895
10 ,, ...	1841-50	24,800	400	2,103,487	8,416	841
10* ,, ...	1846-55	24,900	338†	2,362,236	8,002	800
10 ,, ...	1851-60	23,700	278	2,570,489	7,150	715
10 ,, ...	1861-70	24,400	276	3,018,193	8,347	834
10* ,, ...	1871-80	22,800	450	3,466,866	15,551	1,555
1 year	1871	22,600	2,430	3,254,260	7,912	7,912
,, ...	1877	21,900	690		2,544	2,544
,, ...	1880	22,200	130	3,664,140	475	475

* These are *not* in Dr. Carpenter's Table. † Furnished by the Registrar-General to the House of Commons Committee, 1871.

NOTE.—The figures above the black line—*i.e.*, prior to the year 1838, were *computed* by Dr. Farr and Dr. Greenhow from the Bills of Mortality for London, and are not reliable. The figures below the black line are from records faithfully given in the reports of the Registrar-General. I have Dr. Farr's authority for saying that the statistics of the seventeenth and eighteenth centuries are not trustworthy.

Mr. Simon does not give the mortality for the half-century between 1679 and 1728—possibly for the reason that there was very little small-pox. Dr. Farr also says that all fevers have progressively diminished since 1771. The high general death-rates of the seventeenth and eighteenth centuries were owing to the prevalence of diseases which are now extinct—black death, sweating sickness, leprosy, scurvy, and plague. When small-pox is absent, credit is given to vaccination. Dr. Farr very truly says in his report, 1871, "The Compulsory Vaccination Act of 1867 was followed for three years by a period of quiescence of the variolous infection, but it was the quiescence of slumber, and not of extinction." It was not "stamped out."

C. T. PEARCE.

C. N. Warton, Bridport.
Ed. Whitley, Liverpool.

ENGLISH LIBERAL—1.

C. C. Cotes, Shrewsbury.

SCOTTISH CONSERVATIVES—2.

Admiral Sir J. C. D. Hay, Wigtown.
Sir H. E. Maxwell, Wigtownshire.

SCOTTISH LIBERALS—2.

E. Marjoribanks, Berwickshire.
John Ramsay, Falkirk.

IRISH HOME-RULERS—19.

John Barry, Wexford.
Philip Callan, Louth.
John Daly, Cork.
Charles Dawson, Carlow.
H. J. Gill, Westmeath.
E. D. Gray, Carlow.
Richard Lalor, Queen'sCo.
Ed. Leamy, Waterford.
Justin McCarthy, Longford.
Patrick Martin, Kilkenny Co.
C. H. Meldon, Kildare.
R. H. Metge, Meath.
F. H. O'Donnell, Dungarvan.
W. H. O'Sullivan, Limerick Co.
Richd. Power, Waterford.
J. E. Redmond, New Ross.
Thomas Sexton, Sligo.
J. F. Smithwick, Kilkenny.
T. D. Sullivan, Westmeath.

IRISH CONSERVATIVES—6.

G. De la Poer Beresford, Armagh.
Wm. Ewart, Belfast.
E. Macnaghtan, Antrim.
D. R. Plunket, Dublin University.
Col. Taylor, Dublin Co.
A. L. Tottenham, Leitrim.

We put it te any impartial observer whether these sixty names can be taken as representative of intelligence and good sense, as against the majority, or whether any cause with which they are identified is likely to prevail. The votes of several of the Home-Rulers merely stand for their policy of obstruction. "We vote," as one of them is reported to have said, "for what is likely to make most mischief."

FROM G. F. KOLB, MUNICH,

Member Extraordinary of the Royal Statistical Commission of Bavaria.

FROM childhood I have been trained to look upon the cow-pox as an absolute and unqualified protective. I have, from my earliest remembrance, believed in it more strongly than in any clerical tenet or ecclesiastical dogma. Open and acknowledged failures did not shake my faith. I attributed them either to the carelessness of the operator or the badness of the lymph. In course of time, the question of vaccine compulsion came before the Reichstag, when a medical friend supplied me with a mass of pro-vaccination statistics, in his opinion conclusive and unanswerable. This awoke the statistician within me. On inspection, I found the figures were delusive; and a closer examination left no shadow of doubt in my mind that the so-called statistical array of proof was a complete failure. My investigations were continued, but with a similar result. For instance, in the Kingdom of Bavaria, into which the cow-pox was introduced in 1807, and where for a long time no one, except the newly-born, escaped vaccination, there were, in the epidemic of 1871, no less than 30,742 cases of small-pox, of whom 29,429 had been vaccinated, as is shown in the documents of the State Department. When, with these stern proofs before us of the inability of vaccination to protect, we reflect upon the undeniable and fearful mischief which the operator so often inflicts upon his victims, the conclusion forces itself upon us, that the State is not entitled either in justice or in reason to put in force an enactment so directly subversive of the great principle of personal right. In this matter State compulsion is, in my opinion, utterly unjustifiable. — *From Letter to Mr. William Tebb, Jan.* 22, 1882.

MR. HASKER'S CASE.

MR. WALTER HASKER appeared at the Lambeth Police-court on Feb. 9, on an adjourned summons, charging him with neglecting to have his child vaccinated within three months from the date of birth.

Mr. Corrie Grant, barrister, appeared for the defence, and Mr. Stevens, Clerk to the Camberwell Guardians, prosecuted.

On Mr. Stevens rising to resume the case, Mr. Grant objected, as Mr. Stevens was neither a solicitor nor a barrister. In addition, he had already given evidence in the case; but the objection was overruled.

Mr. Stevens then read the correspondence that had taken place with the Local Government Board, from which it appeared that the Board maintains that a prosecution for one child cannot be held to exempt a vaccination-nonconformist from prosecution on the score of subsequent children, but that he must show his sincerity by exhibiting opposition in the case of each separately.

Mr. Grant objected that there was no evidence to prove the offence charged, which objection was also overruled.

Mr. Grant said he proposed, with the magistrate's permission, to show that the defendant had, in the words of the 29th section, reasonable cause for the neglect to vaccinate.

Mr. Ellison asked what the nature of the evidence was.

Mr. Grant replied that one fact he should be able to prove was, that variolous matter was still used as lymph, notwithstanding the prohibition contained in the 32nd section. Another was that dangerous diseases were communicated by vaccine lymph. It had, for instance, been strenuously denied by the Government Vaccinators in past years that any form of syphilis had been or could be communicated by vaccination, but they had now abandoned that contention, as they were unable to fight against such overwhelming testimony as that of the Rivolta cases. No one on the other hand seemed to agree as to the character of the lymph to be used. Mr. Badcock, at Brighton, used lymph got from a calf to which small-pox had been given, Dr. Carpenter had another system, while Dr. Cameron contended that nothing was good except vaccine direct from the calf. Each of these great authorities strenuously contended that the other systems were wrong, and the defendant only differed from them in that while each objected to the other two, he objected to all three as equally dangerous and health-destructive. Only last week Dr. Andrew Clark, presiding at a meeting on the subject, remarked that there were two sides to the question, and that it must be re-discussed. Figures showed that since vaccination, epidemics of small-pox had greatly extended, and there were more deaths than before, which was a reason why his client should not be convicted pending some decision of Parliament. To punish a man for refusing—in the face of what he believed to be a danger of disease—to have his child vaccinated was contrary to high moral law and a fair construction of constitutional law. He believed this prosecution was taken with a particular desire to press the defendant because he had made himself a leader in this agitation.

Mr. Stevens said that was not so.

Mr. Ellison intimated that he would hear the evidence, and Mr. Grant then called Dr. Edward Haughton, of Upper Norwood, who testified that he had given special attention to the question of vaccination for the past fifteen years, and had known evil results follow vaccination.

Mr. Ellison remarked that after the answer of the Local Government Board, all he had to consider was whether the defendant had proved that he had a reasonable excuse, under the 29th section of the Act, for neglecting to have his child vaccinated. A conscientious objection was not an answer under the 29th section. A man might be put in the witness-box who would say that Christianity was a sham, but it did not follow that it was so. *He could not say that the defendant had proved a reasonable excuse*, and he must therefore convict him; but having been actuated by conscientious motives, the highest penalty would not be inflicted. The defendant would be fined 7s. 6d., and £1. 1s. costs.

It is understood that a case will be taken to one of the higher courts.

MR. WHITE will deliver a lecture entitled, "How will you have it? or, with what shall you be vaccinated?" before the Zetetical Society, in their hall, 9, Conduit-street, Regent-steeet, on Wednesday evening, March 8, at 8 o'clock. The lecture will be followed by discussion. Cards of admission may be had from Mr. Wm. Young, 114, Victoria-street, S.W.

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